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- GRAY SCALE DOCUMENTS

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1: /cgn2_6/ptodata/1,

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3: /cgn2_6/ptodata/1,

4: /cgn2_6/ptodata/1,

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Maximum Match 100%
Listing first 45 summaries
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GenCore version 5.1.6 Copyright (c) 1993 - 2003 Compugen Ltd
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/cgn2_6/ptodata/1/iaa/5B_COMB.pep:*
/cgn2_6/ptodata/1/iaa/5B_COMB.pep:*
/cgn2_6/ptodata/1/iaa/6B_COMB.pep:*
/cgn2_6/ptodata/1/iaa/BCTUS_COMB.pep:*
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463.411 Million cell updates/sec
US-09-087-232A-13
US-08-961-15-14
US-08-975-967A-2
US-08-975-967A-2
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US-09-944-185-52
US-08-46-669-4
US-09-945-583-52
US-08-46-669-4
US-09-945-583-50
US-08-46-669-4
US-09-945-583-51
US-08-46-669-2
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US-08-46-669-2
US-08-46-669-3
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US-09-087-232A-13
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## ALIGNMENTS

Patent No. 6153431

GENERAL INFORMATION:

APPLICANT: Quillant

TITLE C.

VARIANTS

HUMAN IMMUNODEFICIENCY VIRUS CO-RECEPTOR VARIANTS ASSOCIATED WITH RESISTANCE TO V.

TO VIRUS INFECTION

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                                                                                                                                   ; MOLECULE TYPE: protein US-09-087-232A-13
                                                                   Query Match 100.0%;
Best Local Similarity 100.0%;
Matches 352; Conservative (
                                                                                                                                                                                               TELEPHONE: (212) 408-21
TELEPAX: (212) 755-251:
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
LENGTH: 352 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30 (EPO)
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                               NAME: KOLE, LISA B. REGISTRATION NUMBER: 35,225
REGISTRATION NUMBER: APTELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 60/048,057
FILING DATE: 30 MAY 1997
ATTOREY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ZIP: 10112
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy
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TITLE OF INVENTION:
NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CORRESPONDENCE ADDRESS
                                                                                                                                                                    TYPE: amino acid
TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICATION NUMBER: US/09 FILING DATE: 28 MAY 1998
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         STATE: New York
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New York
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        USA
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                                                                 Score 1841; DB 4;
Pred. No. 2.7e-144;
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RESULT 2
US-08-861-105-14
                                                                     TELEFAX: 201-343-1684
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
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ADDRESSEE: David A. Jackson, Esq.
STREET: 411 Hackensack Ave, Continental Plaza, 4th
                                                                                                                                                                                                                                                                         CLASSIFICATION: 436 PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                              PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 0:
FILING DATE: 19-JUN-1996
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    COMPUTER READABLE FORM:
                                                                                                                           TELECOMMUNICATION INFORMATION: TELEPHONE: 201-487-5800
                                                                                                                                                                                                    ATTORNEY/AGENT INFORMATION:
NAME: Jackson Esq., Davi
                                                                                                                                                                                                                                                                                                                                                                                                                            CURRENT APPLICATION DATA
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                                                                                                                                                                                 NAME: Jackson Esq., David A. REGISTRATION NUMBER: 26,742
                                                                                                                                                                                                                                                                                                                                                                                                                                         COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
                                                                                                                         TELEPHONE:
                                                                                                                                                                 REFERENCE/DOCKET NUMBER:
                                                                                                                                                                                                                                         APPLICATION NUMBER: US 0 FILING DATE: 13-APR-1994
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TOPOLOGY: 11
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                                amino acid
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US-08-861-105-14
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Best Local S
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                                                                                                             INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                COMPUTER: IBM PC COMPATIBLE
OPERATING SYSTEM: PC-DOS/MS-DOS
SOTTMARE: PatentIn Release #1.0,
CURRENT APPLICATION DATA:
                                                                                                                                                                                                    ATTORNEY/AGENT INFORMATION:
NAME: NO. 6265184and, Gr
REGISTRATION NUMBER: 35,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ORIGINAL SOURCE:
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HYPOTHETICAL:
                                                                     SEQUENCE CHARACTERISTICS
LENGTH: 352 amino acid
                                                                                                                                              TELECOMMUNICATION INFORMATION: TELEPHONE: 206-485-1900
                   MOLECULE TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                          COMPUTER READABLE FORM:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TITLE OF INVENTION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              STREET: 6300 :
CITY: Chicago
                                      TOPOLOGY:
                                                                                                                                            TELEPHONE:
                                                                                                                                                                                     REFERENCE/DOCKET NUMBER:
                                                                                                                                                                                                                                                            CLASSIFICATION: 435
                                                                                                                                                                                                                                                                               FILING DATE:
                                                                                                                                                                                                                                                                                               APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                           MEDIUM TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                 COUNTRY:
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                                                     amino acid
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                Illinois
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                                                                     352 amino acids
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                                                                                                                               206-485-1662
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Pred. No. 2.7e-144;
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                                                                                                                                                                                                                                                                                                                                     Version #1.30
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TITLE OF

STREET:

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: .NAME/KEY: mlsc_feature
: OTHER INFORMATION: /- US-08-575-967A-2
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; MOLECULE TYPE: US-08-833-752-5
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GENERAL II
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Best Local Similarity
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                                                                                       REFERENCE/DOCKET NUMBER: INFORMATION FOR SEQ ID NO: 5: SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                  COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT: VASSART, GİLBERT
APPLICANT: LIBERT, FREDERICK
TITLE OF INVENTION: ACTIVE AND INACTIVE CC-CHEMOKINES RECEPTOR
TITLE OF INVENTION: AND NUCLEIC ACID MOLECULES ENCODING SAID RECEPTOR
NUMBER OF SEQUENCES: 17
                                                                                                                                                                                                           SOPTWARE: Patentin Release #1.0, Version #1.25 (EPO)
CURRENT APPLICATION DATA
APPLICATION NUMBER: -- 05/08/833,752
FILING DATE: 9-APR-1997
                                                                                                                                            CLASSIFICATION: 536
ATTORNEY/AGENT INFORMATION:
NAME: Altman, Dandel E
REGISTRATION NUMBER: 34,
                                                                                                                                                                                                                                                                                                                                                                                                                                                             CORRESPONDENCE ADDRESS:
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                                        TOPOLOGY:
                                                                      LENGTH:
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                                                                     352 amino acids
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Pred. No. 2.7e-144;
; Mismatches 0;
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; MOLECULE TYPE:
; FRAGMENT TYPE:
US-09-045-583-52
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US-09-045-583-52
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Best Local
                                                                          TELEFAX: (617)742-4214
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GENERAL INFORMATION:
                                                                                                                                            ATTORNEY/AGENT INFORMATION:
NAME: MANDIAGOUTAS, AMY E.
REGISTRATION NUMBER: 36,207
REFERENCE/DOCKET NUMBER: MN:
                                                                                                                                                                                                                         FILING DATE: 20-MAR-CLASSIFICATION: 435
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                           COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0,
CURRENT APPLICATION DATA:
                                                                                                                                TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                COMPUTER READABLE FORM: MEDIUM TYPE: Floppy
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TITLE OF INVENTION:
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                                         TOPOLOGY:
                                                                                                                                                                                                   FILING DATE:
                                                                LENGTH:
                                                                                                                   TELEPHONE:
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                                                                                                                                                                                                                                                                 APPLICATION NUMBER:
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                                                 H: 352 amino acids amino acid
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                                                                                                                                                                                                                                                                                                                                                                                     Massachusetts
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No. 6287805el Molecules
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Pred. No. 2
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; SEQUENCE DESCRIPTION: SEQ ID NO: US-09-534-185-52
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Patent No. 6403767
GENERAL INFORMATION:
APPLICANT: Graham, Gerard J. et al.
TITLE OF INVENTION: No. 6403767el Molecules of the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Matches 350; Conserv
                                                                                                               INFORMATION FOR SEQ ID NO: 52:
SEQUENCE CHARACTERISTICS:
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MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Vei
CURRENT APPLICATION NUMBER: US/09/534,185
FILING DATE: 24-Mar-2000
CLASSIFICATION: CUnknown>
                                                                                                                                                                                 REFERENCE/DOCKET NUMBER: MNI-044 TELECOMMUNICATION INFORMATION:
                                 FRAGMENT TYPE:
                                                                                                                                                                                                                                                                                                     PRIOR
                                              MOLECULE TYPE:
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                                                                               TYPE: amino acid
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                                                                                                                                                                                                                                                                   FILING DATE: <Unknown>
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                                                                TOPOLOGY:
                                                                                             LENGTH: 352 amino acids
                                                                                                                                                               TELEPHONE: (617)227-7400
                                                                                                                                                                                                                                 NAME: Mandragouras, Amy E.
                                                                                                                                                                                                                                                                                    APPLICATION NUMBER: 09/045,583
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                         Query Match
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            Best Local
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Best Local
 Matches
                                                                                                                                       TELEFAX: (202) 371-2540 INFORMATION FOR SEQ ID NO:
                                                                                                                                                                 REGISTRATION NUMBER: 36,688
REFERENCE/DOCKET NUMBER: 14
TELECOMMUNICATION INFORMATION:
TELEPHONE: (202) 371-2600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT: LI, Y1
TITLE OF INVENTION:
TITLE OF INVENTION:
                                                                                                                                                                                                                                    CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
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                                                                     MOLECULE TYPE:
                                                                                                                        SEQUENCE CHARACTERISTICS:
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                                                                               TOPOLOGY:
                                                                                                                                                                                                                                                                                                                     MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                         NAME: STEFFE,
                                                                                                                                                                                                                                                                 FILING DATE:
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Score 1826; D
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Pred. No. 8.3e-144;
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US-09-517-605-5
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US-09-517-605-5
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Best Local S
Matches 346
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CURRENT FILING DATE: 2000-03-02
NUMBER OF SEQ ID NOS: 17
SOFTWARE: PATCHTIN VOT. 2.0
SEQ ID NO 5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      sequence 5, Application US/09517605
Patent No. 6391567
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GENERAL INFORMATION:
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APPLICANT: Kwon, Douglas S.
APPLICANT: van Kooyk, Yvette
APPLICANT: Geijtenbeck, Tneo
TITLE OF INVENTION: CELLS
FILE REFERENCE: 1049-1-017
                                                                                                                                                                                                                                                                                                                                                                                     LENGTH: 352
TYPE: PRT
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                                                                                                                                     LLTIDRYLAVVHAVEALKARTVTEGVVTSVITWVVAVEASLPGIIETRSQKEGLHYTCSS 180
     GEKFRNYLLVFFQKHTAKRFCKCCSTFQQEAPERASSVYTRSTGEQEISVGL
                                            MIVYFLFWAPYNIVLLLNTFQEFFGLNNCSSSNRLDQAMQVTETLGMTHCCINPIIYAFV
                                                                                                  HFPYSQYQFWKNFQTLKIVILGLYLPLLVWYICYSGILKTLLRCRNEKKRHRAVRLIFTI
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                                                                                  HEPYSQYQEWKNEQTLKIVILGLVLPLLVMVICYSGILKTLLRCRNEKKRHRAVRLIFTI
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nilarity 98.3%;
Conservative
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Pred. No. 4.5e-142;
3; Mismatches 3;
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Best Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      COMPUTER: IBM 486
OPERATING SYSTEM: WINDOWS FOR WORKGR SOFTWARE: MICROSOFT WORD
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/724,984A
FILING DATE: October 3, 1996
CLASSIFICATION DATA:
PPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                      INFORMATION FOR SEQ ID NO: SEQUENCE CHARACTERISTICS:
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CORRESPONDENCE ADDRESS:
ADDRESSEE: SmithKline B
STREET: 709 Swedeland R
CITY: King of Prussia
STATE: PA
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ATTORNEY/AGENT INFORMATION:
NAME: William T. Han
NAME: William T. Han
NAME: William T. Han
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REFERENCE/DOCKET NUMBER: ATC
TELECOMMUNICATION INFORMATION:
TELEPHONE: 610 270 5024
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ZIP: 19406-0939
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                                                                                                                                                                                                                                                                                                                                288;
                                                                                                                                                                                                                                                                     Amino Acid
                                                                    TIMIVYFLFWAPYNIVLLLNTFQEFFGLNNCSSSNRLDQAMQVTETLGMTHCCINPIIYA 298
SSHFPYSQYQFWKNFQTLKIVIIGLVLPLLVMVICYSGILKTLLRCRNEKKRHRAVRLIF
                                                                                                                                                             IILLTIDRYLAIVHAVFALKVTTVNFGVITSVVTWVVAVFASLPEIIFTRSQKEGFHYTC
                                                                                                                                                                                                                    KKLKSVTDIYLLNLAISDLLFLLTLPFWAHYAANEWIFGNIMCKVFTGVYHIGYFGGIFF
                                                                                                                                                                                                                                   KRLKSMTDIYLLNLAISDLFFLLTVPFWAHYAAAQWDFGNTMCQLLTGLYFIGFFSGIFF 118
                                                     AIMIVYFLFWTPYNIVLLLTTFQEFFGLNNCSSSNRLDQAMQATETLGMTHCCLNPVIYA
                                                                                                          SPHFPHTQYHFWKSFQTLKMVILSLILPLLVMIICYSGILHTLFRCRNEKKRHRAVRLIF
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ilarity 81.4%;
Conservative 2
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Pred. No. 5.1e-120;
9; Mismatches 35;
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Best Local Similarity
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TELEFAX: 201-994-1744
INFORMATION FOR SEQ ID NO: 3:
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MEDIUM TYPE: Floppy disk
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NAME: Ferraro, Gregory D.
REGISTRATION NUMBER: 36,134
REFERENCE/DOCKET NUMBER: 32
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OPERATING SYSTEM:
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New Jersey
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                                                                                                                                                           WKNFQTLKIVILGLVLPLLVMVICYSGILKTLLRCRNEKKRHRAVRLIFTIMIVYFLFWA 249
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VFFRKHITKRFCKQCPVFYRETVDGVTSTNTPSTGEQEVSAGL
                                   VFFQKHIAKRFCKCCSIFQQEAPERASSVYTRSTGEQEISVGL 352
                                                                                                                                                                                                                                                                                     LNLAISDLLELITLPLWAHSAANEWVFGNAMCKLETGLYHIGYFGGIFFIILLTIDRYLA 128
                                                                                                                                            WNNFHTIMRNILGLVLPLLIMVICYSGILKTLLRCRNEKKRHRAVRVIFTIMIVYFLFWT 244
                                                                                                                                                                                                                 IVHAVFALKARTVTFGVVTSVITWLVAVFASVPGIIFTKCQKEDSVYVCGPYFP----RG 184
                                                                      PYNIVILLNTFQEFFGLSNCESTSQLDQATQVTETLGMTHCCINPIIYAFVGEKFRRYLS
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                                                                                                                                                                                                                                                                                                                                                                                                                                Conservative
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SYSTEM: PC-DOS/MS-DOS
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      05-JUN-1995
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Pred. No. 4.7e-105;
2; Mismatches 46;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length 347;
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Best Local Similarity
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MEDIUM TYPE: Floppy disk
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                               MOLECULE TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CLASSIFICATION: 424
ATTORNEY/AGENT INFORMATION:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT: Coughlin, TITLE OF INVENTION: NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TELEPHONE: 415-8857-0663
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NAME: Cserr, Luann
REGISTRATION NUMBER: 31
REFERENCE/DOCKET NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SOFTWARE: PatentIn Release #1.0, Version
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            STREET: · 5 Palo Alto Square
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                                                                                                                                                                                                142 IVHAVFALKARTVTFGVVTSVITWLVAVFASVPGIIFTKCQKEDSVYVCGPYFP----RG
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                                                                                                                                                                                                                                                                                                                                                259;
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            VFFQKHIAKRFCKCCSIFQQEAPERASSVYTRSTGEQEISVGL 352
VFFRKHITKRFCKQCPVFYRETVDGVTSTNTPSTGEQEVSAGL 360
                                                                 PYNIVILLNTFQEFFGLSNCESTSQLDQATQVTETLGMTHCCINPIIYAFVGEKFRRYLS
                                                                                                                                WNNFHTIMRNILGLVLPLLIMVICYSGILKTLLRCRNEKKRHRAVRVIFTIMIVYFLFWT
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amino acid
                                                                                PYNIVLLLNTFQEFFGLNNCSSSNRLDQAMQVTETLGMTHCCINPIIYAFVGEKFRNYLL
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           MAMMALIAN MONOCYTE CHEMOATTRACTANT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US/08450393A
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Pred. No. 4
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                                                                                                                                                                                                                                                                                                                                                                                              54; DB 1;
. 4.9e-105;
tches 46;
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US-08-446-669-4
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US-08-446-669-4
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Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Matchea
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TELEFAX: 415-857-0663
TELEX: 380816CooleyPA
INFORMATION FOR SEQ ID NO: 4:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SEQUENCE CHARACTERISTICS:
LENGTH: 360 amino acids
TYPE: amino acid
TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SOFTWARE: PatentIn Release #1.0, CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC competible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           REFERENCE/DOCKET NUMBER: UC
TELECOMMUNICATION INFORMATION:
TELEPHONE: 415-843-5000
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TITLE OF INVENTION: MAMMALIAN MONOCYTE CHEMOATTRACTANT TITLE OF INVENTION: PROTEIN RECEPTORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT: Charo, Israel APPLICANT: Coughlin, Sha
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICATION NUMBER: US/08/446,669 FILING DATE: May 25, 1995 CLASSIFICATION: 435
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NAME: Neeley, Richard
REGISTRATION NUMBER:
                                                                                                                                                                                                                                                                                 142
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                                                                                                                                                                                                                           190 WKNFQTLKIVILGLVLPLLVMVICYSGILKTLLRCRNEKKRHRAVRLIETIMIVYFLFWA 249
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                                                                                      VFFQKHIAKRFCKCCSIFQQEAPERASSVYTRSTGEQEISVGL
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Pred. No. 4.9e-105;
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Best Local S
Matches 259
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Patent No. 6287805
GENERAL INFORMATION:
APPLICANT: Graham
                                                                                                                                                                                                                                                                                                                                                                                                                                                              TELEFAX: (617)742-421.
INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                  TOPOLOGY: 1ir
MOLECULE TYPE:
FRAGMENT TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CLASSIFICATION: 435
PRIOR APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patenth Release $1.0, Version $1.25
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT: Graham, Gerard J. et al.
TITLE OF INVENTION: No. 6287805el Molecules of the G Protein-Coupled
NUMBER OF SEQUENCES: 56
                                                                                                                                                                                                                                                                                                                                                                                                                                    SEQUENCE CHARACTERISTICS LENGTH: 360 amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TELECOMMUNICATION INFORMATION: TELEPHONE: (617)227-7400
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ATTORNEY/AGENT INFORMATION:
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                                                                                                                                                                                                                                                                                                          Local 259;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NAME: Mandragouras, Amy REGISTRATION NUMBER: 36 REFERENCE/DOCKET NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICATION NUMBER: FILING DATE: 20-MA
                                                                                                                                                                                                                                                                                                                                                                                                                         TYPE: amino acid
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o. 6287805
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                VFFQKHIAKRFCKCCSIFQQEAPERASSVYTRSTGEQEISVGL 352
                                                 PYNIVLLLNTFQEFFGLNNCSSSNRLDQAMQVTETLGMTHCCINPIIYAFVGEKFRNYLL 309
                                                                                                  Massachusetts
VFFRKHITKRFCKQCPVFYRETVDGVTSTNTPSTGEQEVSAGL
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internal
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Pred. No. 4.9e-105;
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RESULT 14 US-09-534-185-50 ; Sequence 50, Ap

Application US/09534185

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GENERAL INFORMATION:
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                                                                                                                                                                                                                                                                                                                                                                                       Local
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OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT: Graham, Gerard J. et al.
TITLE OF INVENTION: No. 6403767el Molecules of the G Protein-Coupled
Heptahelical Receptor Superfamily and Uses
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       REFERENCE/DOCKET NUMBER: MNI-044
TELECOMMUNICATION INFORMATION:
TELEPHONE: (617)227-7400
TELEFAX: (617)742-4214
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ATTORNEY/AGENT INFORMATION:
NAME: Mandragouras, Amy E.
REGISTRATION NUMBER: 36,207
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQUENCE DESCRIPTION: SEQ ID NO: 50:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  MOLECULE TYPE:
FRAGMENT TYPE:
                                                                                                                                                                                       142
                                                                                                                                                                                                     130 VVHAVFALKARTVTFGVVTSVITWVVAVFASLPGIIFTRSQKEGLHYTCSSHFPYSQYQF 189
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318
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                                                                                                                                                                                                                                                                                                                                                                          Similarity 75.5
59; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICATION NUMBER: US/09/534,185
FILING DATE: 24-Mar-2000
CLASSIFICATION: CUNKNOWN>
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       STATE: Massachusetts
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ADDRESSEE:
                                                                                                                       IVHAVFALKARTVTFGVVTSVITWLVAVFASVPGIIFTKCQKEDSVYVCGPYFP----RG 197
                                                                                                                                                                                                                                                 LNIAISDLLFLITLPLWAHSAANEWVFGNAMCKLFTGLYHIGYFGGIFFIILLTIDRYLA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TOPOLOGY: linear
                                                         VFFRKHITKRFCKQCPVFYRETVDGVTSTNTPSTGEQEVSAGL 360
                            VFFQKHIAKRFCKCCSIFQQEAPERASSVYTRSTGEQEISVGL 352
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28 State Street
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internal
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RESULT 15

Search completed: June Job time: 37.3492 secs

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PCT-US95-00476-4
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Best Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ZIF: 30012 FORM:
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
COMPUTER: IBM PC DOSYMS-DOS
COMPUTER: PC-DOSYMS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT: The Regents of the University of California TITLE OF INVENTION: MAMMALIAN MONOCYTE CHEMOATTRACTANT TITLE OF INVENTION: PROTEIN RECEPTORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SOFTWARE: PatentIn Release #1.0, Version CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NAME: BETILIUM. 20,124
REGISTRATION NUMBER: 20,124
REGISTRATION NUMBER: 555
REFERENCE/DOCKET NUMBER: 555
TELECOMMUNICATION INFORMATION: 310-977-1001
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                                                                                                                                                                                                                                                                                                                                                                                                                         SEQUENCE CHARACTERISTICS:
LENGTH: 360 amino acid
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NAME: Berliner, Robert
                                                                                                                                                                                                                                                                                                                                                                                    TOPOLOGY: 1:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ADDRESSEE: Robbins, Berliner & Carson STREET: 201 N. Figueroa Street, 5th Floor CITY: Los Angeles
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        STATE: California
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FILING DATE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TELEFAX: 310-977-1003
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                         VFFQKHIAKRFCKCCSIFQQEAPERASSVYTRSTGEQEISVGL 352
                                                                                                                                                                                                                                                                                                                                                                                                                              360 amino acids
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                                                                                                                                                                                                                                                                                                                                                                                                     linear
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                                                                                                                                                                                                                                                                                                                         32;
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Perfect score:
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Maximum Match 100%
Listing first 45 summaries
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/SIDS2/gcgdata/geneseq/geneseqp-embl/AA191.DAT:*
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Human CCR5. Homo
Human chemokine re
Human CC chemokine
HIV-1 co-receptor
Human HIV-1 co-rec
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Human CR5 protein
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Human C-C chemokin	AAW51/44	Ţ	355	21.2	942.5
1-00	٠.	200	212	٠.	90.0
tive	0	18	215	52.0	958
Inactive human CCR	AAW27406	18	184	2	958
. Rat CC chemokine r	AAW29179	18	355	5	1016.5
Human CC-chemokine	AAB20571	21	355	7.	1055
MIP-la	AAW25751	18	355	7.	1055
3	AAW26588	18	355	7.	1055
hemokin	AAR52749	15	355	7.	1055
MCP-1	AAB46859	22	329	۲	1138.5
CCR2a pro	AAG80107	22	374	ς.	1224
n monocyte	AAR79165	16	374	5	1224
ndogenous 1	ABB56340	22	360	ω.	1358
₹.	AAU07614	22	360	٠.	1364
CCR2b pro	AAG80108	22	360		1364
monocyte	AAW35833	18	360	٠.	1364
monocyte ch	AAR79166	16	360		1364
CCR2-641 po	AAU07613	22	360	٠.	1365
CC-CKR5 pro	AAW54037	19	354	٠.	1546
င္	AAW26766	18	332	9.	1641.5
c	AAW27125	18	352	8	1807
Amino acid sequenc	AAG79089	22	352	8	1814
G-protein	AAU97150	23	352	9	1826
G-protein	AAE07046	22	352	9	1826
G-protein	AAE07037	22	352	9	1826
G-protoin	AAY80128	21	352	9	1826
G-protein	AAW07602	18	352	9	1826
G-protein	AAU97152	23	352	9.	1833
HDGNR10 pro	AAB46858	22	352	9	1833
G-protein	AAE07048	22	352	9	1833
G-protein	AAE07039	22	352	9	1833
n cck5 Gln	AAM52829	23	352	9	1835
ndog	ABB56342	22	352	9	1835
an CC chemok	W2383	19	371	ē	1836
Fusion protein con	AAY41280	20	439	100.0	1841

## ALIGNMENTS

RESULT 1 AAW27407

Human CCR5

14-APR-1998

(first entry)

AAW27407;

AAW27407 standard; Protein; 352 AA.

Human Cys-Cys chemokine receptor 5; CCR5; human immunodeficiency virus; type 1; type 2; HIV-1; HIV-2; diagnosis; treatment; prevention; inflammatory disease; rheumatoid arthritis; glomerulonephritis; asthma; idiopathic pulmonary fibrosis; psoriasis; viral infection; cancer; atherosclerosis; autoimmune disorder. 06-AUG-1996; 01-MAR-1996; WPI; 1997-479829/44 Libert F, 28-FEB-1997; 04-SEP-1997 W09732019-A2 Homo sapiens. (EURO-) EUROSCREEN Parmentier M, 96EP-0870102. 96EP-0870021. 97WO-BE00023. Samson ŗ Vassart G;

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RESULT 2
AAW27123
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XX AAW2
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   The present sequence is human CC (Cys-Cys) chemokine receptor 5 (CCR5), which is stimulated by MIP-1 alpha, MIP-1 beta or RANTES chemokines, but not by monocyte chemoattractant protein 1 (MCP-1), MCP-2, MCP-3, interleukin-8 (IL-8) or growth related gene product alpha (GRO alpha) chemokines. Active CCR-5 is also a receptor of human immunodeficiency virus type 1 or type 2 (HIV-1 or HIV-2) CCR5 or its cDNA can used to diagnose, treat and/or prevent inflammatory diseases, e.g. rheumatoid arthritis, glomerulonephritis, asthma, idiopathic pulmonary fibrosis and psoriasis, viral infections, especially HIV-1 or HIV-2 infection, cancer, atherosclerosis and autoimmune disorders.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Active and inactive useful to diagnose, autoimmune disease a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Claim
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                                                                                                                                                                                                      Chemokine receptor 88C; atherosclerosis; rheumatoid arthritis; tumour; asthma; viral infection; AIDS; inflammation; autoimmune disease; therapy; diagnosis; leukocyte trafficking; g protein coupled receptor; ligand; modulator; antibody; human
                                                                                                                                                                                                                                                                                                                                  Human chemokine receptor 88C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence
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                          Domain
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                                                                             Domain
                                                                                                                                                      sapiens
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           standard; Protein;
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                          /label= Extracellular_domain
56..67
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                                                                                                   Location/Qualifiers
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Pred. No. 3.6e-200;
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Best Local
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20-DEC-1995;
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N-PSDB; AAT85161.
                                                                                                                                                                                                                                        Sequence
                                                                                                                                                                                                                                                                response,
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                                                                                                                                                        1 MDYQVSSPIYDINYYTSEPCQKINVKQIAARLLPPLYSLVFIFGFVGNMLVILILINCKR
                                                                                                                                                                                                      Similarity
                                            MDYQVSSPIYDINYYTSEPCQKINVKQIAARLLPPLYSLVFIFGFVGNMLVILILINCKR
                                                                                                                                                                                                                                                                abnormal haematopoietic processes
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95US-0575967
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213..2
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Pred. No. 3.6
0; Mismatches
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 This protein 
CC chemokino
                                                  Claim 68; Fig 1C; 70pp; English.
                                                                                                                                                                                       Alkhatib G, Berger
Feng Y, Kennedy PE,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Domain
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CC chemokine receptor 5; CCR5; human immunodeficiency virus;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Human CC
                                                                                    CC chemokine receptor 5 polypeptide - fusion between HIV and a target cell
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                                                                                                                                                                                                                                                                                28-MAY-1996;
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                                                                                                                                        1998-032650/03.
DB; AAT76920.
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/note= "transmembrane
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /label- IV
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                                                                                                                                                                                                                                                                                                                                                                                                                     note- "transmembrane
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   43..171
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    'note- "transmembrane
                                                                                                                                                                                       : EA, Bro
E, Murphy
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 comprises of a novel human macrophage-selective that has been designated CCR5. The sequence
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                                                                                                                                                                                           Broder
phy PM;
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HIV; CD4; AIDS; therapy;
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Best Local
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                                                                                                                                                                                                         Key
                                                                                                                                                                                                                                                                                                                              HIV-1 co-receptor CCR5
                                  Domain
                                                                                                                     Misc-difference
                                                                                                                                                         Domain
                                                                                                                                                                                           Domain
                                                                                                                                                                                                                                            Homo sapiens
                                                                                                                                                                                                                                                                            gene therapy;
                                                                                                                                                                                                                                                                                              HIV-1; CCR5; CCR5m303;
                                                                                                                                                                                                                                                                                                                                                                  15-MAR-1999
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                                                                                                                                                                                                                                                                                                                                                                                                                                   standard; Protein; 352 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         LKSMTDIYLLNLAISDLFFLLTVPFWAHYAAAQWDFGNTMCQLLTGLYFIGFFSGIFFII 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         MDYQVSSPIYDINYYTSEPCQKINVKQIAARLLPPLYSLVFIFGFVGNMLVILILINCKR
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nilarity 100.0%;
Conservative 0
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                                                                                                                      /note=
101
                                                                                                                                                       32..56
/note=
67..87
 /note-
200..223
                              103..124
/note= "transmembrane domain
                                                                                                    /note-
                                                                                                                                                                                                         Location/Qualifiers
                                                                                 "corresponds to
TGA (Stop) in C
                                                                                                                                       "transmembrane domain 2"
                *transmembrane domain
                                                                                                                                                                     *transmembrane
                                                                                                                                                                                                                                                                                              co-receptor; infection;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0;
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                                                                                  CCr5m303*
                                                                                                                                                                       domain
                                                                                                                                                                                                                                                                                              diagnosis;
                                                                                                   in wild-type CCR5
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240

300 300 120

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(M-tropic) strains of HIV-1. The invention relates to the identification of a CCR5 variant (see AAM88231), designated CCR5m303, comprising the first two transmembrane domains of wild-type CCR5, but lacking transmembrane domains 3-7. The presence of the CCR5m303 variant with the wild type CCR5 allele shows a positive correlation with resistance to infection with M-tropic HIV-1 strains, and may indicate slower progression of the disease. The detection of CCR5 variants may be used to identify individuals at lower risk of infection relative to the general population who, if infected, may exhibit slower progression to AIDS. Probes and primers (see AAV84127-36) are provided for use in diagnostic methods for detecting the presence of such variants. A method is provided for inhibiting HIV-1 infection of a cell expressing the CCR5 variant into the cell, thereby reducing the number of functional CCR5 molecules present on the cell surface.
                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local (
                                                                                                                                                                                                                                                                                                                             Matches
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GEKFRNYLLVFFQKHIAKRFCKCCSIFQQEAPERASSVYTRSTGEQEISVGL
                             MIVYFLFWAPYNIVLLLNTFQEFFGLNNCSSSNRLDQAMQVTETLGMTHCCINPIIYAFV
                                            MIVYFLFWAPYNIVLLLNTFQEFFGLNNCSSSNRLDQAMQVTETLGMTHCCINPIIYAFV
                                                                                                                                                                                                         LKSMTDIYLLNLAISDLFFLLTVPFWAHYAAAQWDFGNTMCQLLTGLYFIGFFSGIFFII
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                                                                                                                                                                                                                                                                    MDYQVSSP1YD1NYYTSEPCQK1NVKQ1AARLLPPLYSLVF1FGFVGNMLV1L1L1NCKR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   amino acid sequence of wild-type human C co-receptor for infection by macrophage-
                                                                                                                                                                                                                                                                                                                             Conservative
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                                                                                                                                                                                                                                                                                                                                         Score 1841; DB 20;
Pred. No. 3.6e-200;
                                                                                                                                                                                                                                                                                                                             Mismatches
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RESULT 5
AAG80111
ID AAG8
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                                                                                                                                                                             Diagnostic agent cuseful for detecti ligand inhibitors
                                                                                                                                                                                                                                                                                                                                                                  Chemokine; tumour diagnosis; colorectal; prostatic; organ rejection; inflammation; autoimmune disease; metastasis; bronchial asthma; lupus; chronic bowel inflammation; rheumatoid arthritis; cytostatic; antiinflammatory; antiasthmatic; immunosuppressive; dermatological;
                                                                                                                                                                                                                                                                        31-MAR-2000; 2000DE-1016013
                                                                                                                                                                                                                                                                                         02-APR-2001; 2001WO-EP03708
                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAG80111 standard; Protein; 352
                                                                                                                                                             Disclosure; Page 10;
                                                                                                                                                                                                               WPI; 2001-626256/72
                                                                                                                                                                                                                              Forssmann W, Adermann
                                                                                                                                                                                                                                                                                                                                           Homo sapiens.
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This invention describes a novel diagnostic agent (A) comprising at least ctwo different ligands (I) for receptors (II) that are implicated in CC disease. (A) are used for the diagnosis of tumors (especially colorectal CC or prostatic), organ rejection, inflammation and autolimmune diseases.

CC Also inhibitors of (I) are used therapeutically against tumors (and their metastases), inflammation (particularly bronchial asthma or chronic bowel inflammation), or autolimmune diseases (rheumatoid arthritis or lupus), CC where the (cardio)vascular, lymphatic, respiratory, nervous, digestive, CC endocrine, motor or urogenital systems or skin are affected, and bone comprow diseases. The products of the invention are chemokine derivatives CC which have cytostatic, antiinflammatory, antiasthmatic, inflammatory cells through a CC constellation of chemokine receptors (CR), which control migration and CC proliferation of these cells. AAG800128 represent human chemokine Query Match Best Local Sequence used 100.0%; llarity 100.0%; Conservative ( A ç illustrate the Score 1841; Pred. No. 3.6 ); Mismatches method 1841; DB 22; No. 3.6e-200; matches 0; of the invention. 352;

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LKSMTDIYLLNLAISDLFELLTVPFWAHYAAAQWDFGNTMCQLLTGLYFIGFFSGIFFII LKSMTDIYLLNLAISDLFFLLTVPFWAHYAAAQWDFGNTMCQLLTGLYFIGFFSGIFFII MDYQVSSPIYDINYYTSEPCQKINVKQIAARLLPPLYSLVFIFGFVGNMLVILILINCKR δð. 밁 Ş 밁 Ş

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19-MAY-2000;
07-FEB-2001;
The present sequence is that of human HIV-1 co-receptor CCR5. Amino acids 2-18 in the N-terminal region of CCR5 comprise an HIV-gpl20-binding site that determines the specificity of the interaction between CCR5 and HIV-1 gpl20. Post-translational sulfation of the tyrosine residues in the CCR5 N-terminus is required for gpl20 binding and may critically modulate the susceptibility of target cells to HIV-1 infection in vivo. The invention provides claimed sulfated peptides (see AAB82947) that are based on the CCR5 N-terminal region and which are effective for inhibiting HIV-1 binding to CCR5. These peptides are used in claimed methods of inhibiting HIV infection of CD4+ cells, of preventing CD4+ cells from becoming infected with HIV, of treating
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Key
Binding-site
                                                                                                                                                                                           Novel compounds comprising specific amino acids within CCR5 (HIV 1 co-receptor) amino terminal domain including negatively charged any sulfated tyrosine residues is useful for treating HIV infection in
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; 2000US-205839P.
; 2001US-267231P.
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12-JAN-2000;
12-JAN-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 a subject whose CD4+ cells are infected with HIV, and of identifying an agent which inhibits binding of a CCR5 ligand to a CCR5 receptor. The methods may be carried out in a subject, especially a human, infected (therapeutic method), not infected with HIV (prophylactic method), or in a subject who is not infected with, but has been exposed to, HIV.
                       N-PSDB;
                                                                 (PFIZ )
                                                                                                                             03-JAN-2001;
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                                                                                                                                                                              Homo sapiens
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Pred. No. 3.6e-200;
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in modulate CCR5-gp120 interaction, CCR5 and gp120 and determining if

the agent

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RESULT 8
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          capable of modulating the interaction of chemotactic chemokine (CCR5) with gp120, comprising incubating the against the agains
                                                                                                                                                                                          human immuno deficiency virus; HIV; long terminal repecthemokine receptor; CRR; cellular dysfunction; HIV infector CC-CKR-5; envelone alugamentation; ----
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19-JUN-1996;
19-MAY-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                             contains a gene encoding CD4, a construct encoding a reporter gene under the regulation of an human immuno deficiency virus (HIV) long terminal repeat (LTR) and that has been transduced with a vector encoding a human chemokine receptor (CKR) where the CD4 and the CKR are present on the cell surface of transformed mammalian cell. The invention is useful for identifying drugs or antibodies that interfere with the translocation of HIV into transformed mammalian cell or for identifying a human chemokine receptor that facilitates the infection of a particular HIV strain into the transformed mammalian cell. Compounds identified can be used to treat cellular dysfunction and to prevent or combat HIV infection. The present sequence is a human chemokine receptor (CKR), CC-CKR-5 related protein. CC-CKR-5 is the principal cofactor for entry mediated by the envelope glycoproteins of primary macrophage-tropic
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                   GEKFRNYLLVFFQKHIAKRFCKCCSIFQQEAPERASSVYTRSTGEQEISVGL
                                                                       MIVYFLFWAPYNIVLLLNTFQEFFGLNNCSSSNRLDQAMQVTETLGMTHCCINPIIYAFV
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Pred. No. 3.6e-200;
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18-JUN-2002

(first entry)

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The present sequence is that of a polypeptide encoded by the human CC chemokine (C-C motif) receptor 5 (CCR5) gene of the invention (see CR ABA97318, ABA97319). The specification describes haplotyping the CCR5 gene of an individual by determining if the individual has one of the CCR5 cross thaplotypes or haplotype pairs fully defined in the specification. CC The specification also describes an isolated polynuclectide comprising a CC nucleotide sequence which is a polymorphic variant of the reference CCR5 gene sequence which is a polymorphic variant of the reference CCR5 cross sequence said comprises an isogene defined by a haplotype described CC in the specification and its encoded polypeptide. The methods of the CCR5 cross sequence with abnormal expression or function of the gene. The CCR5 cross associated with abnormal expression or function of the gene. The CCR5 cross and the screened compounds are useful for treating human CC immunodeficiency virus (HIV): infection and the progression to acquired component of the progression to acquired component of the cCR5 gene of an individual; predicting a haplotype pair for the CCR5 gene of an CC individual; identifying an association between a trait and a haplotype or haplotype pair of the CCR5 gene. The specification describes a composition comprising a genotyping oliponucleotide for detecting a CCR5 colymorphism; a recombinant non-human organism transformed with CCR5 colymorphism; a recombinant non-human organism transformed with CCR5 colymorphism; a recombinant haplotype procedured by the variant sequence; acreening dust transformed with CCR5 colymorphism; a recombinant happening a CCR5 polymorphism; a recombinant happening a CCR5 polymorphism; a recombinant happening a CCR5 polymorphism; a recombinant happening the cCR5 polymorphism and a method for describe and a method for the CCR5 polymorphism.
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de polymorphism; SNP; human
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drug screening;
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3 23;
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                                   Length
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MDYQVSSPIYDINYYTSEPCQKINVKQIAARLLPPLYSLVFIFGFVGNMLVILILINCKR 60

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Indels

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Gaps

The invention relates to a method for identifying a binding compound for CC chemokine receptor 5 (CCR5). The method involves screening a library of test molecules (particularly peptides) with immobilised CC and then identifying those molecules which bind. The invention also relates to CCR5-binding molecules identified using the method of the invention, methods for identifying consensus motifs for CCR5-binding invention, methods for identifying consensus motifs for CCR5-binding

CCR5

Identifying CC chemokine receptor 5 binding compound for treating comprises binding a molecule from library to a molecule having bir property corresponding to CCR5 and identifying bound molecule -

ung AIDS, binding

Example

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RESULT 10
AAM52828
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                                                                                                                                                                                                                                                                                                           Human
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                                                                                                                              Nestor
                                                                                                                                                            20-MAR-2001;
20-MAR-2001;
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21-MAR-2000;
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                                                                                                                                                                                                                                              WO200171346-A2
                                                                                                                                                                                                                                                              Homo
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                                                                                                                                                                                                                                                                                                                                          AAM52828;
                                                                                                                                                                            20-MAR-2001;
                                                                                                                                                                                 21-MAR-2000;
                                                                                                        W-PSDB;
                                                                                                                                             (CONS-) CONSENSUS PHARM
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                                                                                                        2002-010610/01.
DB; ABA02317.
                                                                                                                                                                                                                                                             sapiens.
                                                                                                                                                                                                                                                                            screening;
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                                                                                                                                                                                                                                                                                                          CC chemokine
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                                                                                                                                                                                                                                                                                     immunodeficiency
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                                                                                                                                                                                                                                                                                                                                                        standard;
                                                                                                                                                                                                                                                                                                                                                                                              GEKFRNYLLVFFQKHIAKRFCKCCSIFQQEAPERASSVYTRSTGEQEISVGL
                                                                                                                                                                                                                                                                                                                                                                                                     GEKFRNYLLVEFQKHIAKRFCKCCSIFQQEAPERASSVYTRSTGEQEISVGL
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       LLTIDRYLAVVHAVFALKARTVTFGVVTSVITWVVAVFASLPGIIFTRSQKEGLHYTCSS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    LKSMTDIYLLNLAISDLFFLLTVPFWAHYAAAQWDFGNTMCQLLTGLYFIGFFSGIFFII
                                                                                                                                                           2000US-190996P.
2000US-191299P.
2001US-0813448.
2001US-0813651.
2001US-0813653.
                                                                                                                              Wilson
                                                                                                                                                                                                 2000US-190946P
                                                                                                                                                                                                                2001WO-US09155
                                                                                                                                                                                                                                                                                                                           (first
                                                                                                                                                                                                                                                                             identification.
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                                                                                                                                                                                                                                                                                                          receptor
                                                                                                                                                                                                                                                                                                                                                        Protein;
                                                                                                                                                                                                                                                                                                                          entry)
                                                                                                                                                                                                                                                                                   eptor 5; human; HIV infection;
virus; AIDS; acquired immunodeficiency syndrome;
                                                                                                                                              INC
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                                                                                                                              RH,
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N-PSDB; AAZ24738

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RESULT 11
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Best Local
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WPI;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             methods for determining the relative binding affinity of a test molecule to CCR5 and a computer aided drug screening assay that utilises the three-dimensional structure of CCR5. Compounds identified using the methods of the invention are useful for treating or preventing HIV (human immunodeficiency virus) infection or AIDS (acquired immunodeficiency syndrome) in a patient. The methods of the invention may also be used to identify agonists or antagonists of the interaction of CCR5 with its natural ligand, and to determine a binding motif for
                                                                                                                                  21-OCT-1999
                                                                                                                                                             W09953033-A1
                                                                                                                                                                                                   Synthetic
                                                                                                                                                                                                                                                                               Prostaglandin;
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                                                                                                                                                                                                                                                                                                                                                                                      AAY41280 standard;
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                                                                                                        16-APR-1999;
                                                                                                                                                                                       Homo sapiens.
                                                                                                                                                                                                                             biochemical;
                                                                                                                                                                                                                                                                 chemokine receptor;
                                                    (UYVA-) UNIV
                                                                              16-APR-1998;
                                                                                                                                                                                                                                                      renal
                                                                                                                                                                                                                                           ambda
 1999-620416/53
                                                                                                                                                                                                                           kine receptor; ss2 adrenergic receptor; small G-protein rho; outer medullary potassium ion channel protein; ion-channel aphage repressor protein; G-protein compled receptor; bacte la phage repressor immunohistochemical; orphan receptor; HIV.
                                                                                                                                                                                                                                                                                                                                                                                                                                                      301
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                                                                                                                                                                                                                                                                                                         protein
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                                                                                                                                                                                                                                                                                                                                                                                                                                                    GEKFRNYLLVFFQKHIAKRFCKCCSIFQQEAPERASSVYTRSTGEQEISVGL
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       MIVYFLFWAPYNIVLLLNTFQEFFGLNNCSSSNRLDQAMQVTETLGMTHCCINPIIYAFV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LLTIDRYLAVVHAVFALKARTVTFGVVTSVITWVVAVFASLPGIIFTRSQKEGLHYTCSS
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                          Ma
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                                                                                                                                                                                                                                                                                                                                  (first entry)
                                                    VANDERBILT
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                                                                                                                                                                                                                                                                PG; E2EP3 receptor; E2EP2 receptor; CCR-5; human; ptor; ss2 adrenergic receptor; small G-protein rho;
                                                                              98US-0081989
                                                                                                                                                                                                                                                                                                        containing
                                                                                                        99WO-US08214
                                                                                                                                                                                                                                                                                                                                                                                     Protein;
                           Kennedy
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                                                                                                                                                                                                                                                                                                         human
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Pred. No. 3
                                                                                                                                                                                                                                                                                                        chemokine receptor
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1.6e-200;
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                                                                                                                                                                                                                                                     protein;
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Query Match

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Local

Sequence

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CC The invention provides isolated nucleic acid sequences controlled to prostaglandin (PG) EZEP3 receptor, human PG EZEP2 receptor, human CC chemokine receptor CCR-5, human ss2 adrenergic receptor, rat renal outer CCR medullary potassium ion channel protein or human small G-protein rho, CC together with deduced protein sequences. Also provided is a method for CC the production of eukaryotic proteins by culturing bacteria transformed CC with vectors containing the above nucleic acid sequences or a nucleic acid (I) that comprises: (i) first sequence that encodes either a CC sequence comprising at least three positively charged amino acids, or a CC sequence comprising at least three positively charged amino acids, or a CC DNA-binding protein, or a lambda phage repressor protein. (I) are used of, and in frame with, (ii) a sequence encoding a protein. (I) are used for recombinant production of eukaryotic proteins, particularly membrane proteins, G-proteins are useful for biochemical or structural acc studies; as therapeutic agents; in diagnostic and screening assays and as antigens for use in vaccines, and for raising antibodies that are useful antigens for use in vaccines, and for raising antibodies that are useful antigens for use in vaccines, and for raising antibodies that are useful antigens for use in vaccines, and for raising antibodies that are useful antigens for use in vaccines, and for raising antibodies that are useful antigens for use in vaccines, and for raising antibodies that are useful antigens for use in vaccines, and for raising antibodies that are useful antigens for use in vaccines, and for raising antibodies that are useful antigens for use in vaccines, and for raising antibodies that are useful antigens for use in vaccines, and for raising antibodies that are useful antigens for use in vaccines, and for raising antibodies that are useful antigens for use in vaccines, and for raising antibodies that are useful antigens for useful and the proteins and the proteins are useful antigens for useful 
as immunohistochemical markers, e.g. for orphan receptors channels. Antibodies raised against the chemokine receptor used (when administered as antiserum or generated in vivo) entry of human immune deficiency virus (HIV) into cells.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Disclosure; Page 49-53; 81pp;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      preventing HIV infection
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                New nucleic acid constructs proteins in bacteria, for pr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       r producing
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                for high level expression of eukaryotic roducing e.g. chemokine receptor CCR-5 for
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Best Loc
Matches
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352; Conserv
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                                                                             MIVYFLFWAPYNIVLLLNTFQEFFGLNNCSSSNRLDQAMQVTETLGMTHCCINPIIYAFV
HEPYSQYQFWKNFQTLKIVILGLVLPLLLVMVICYSGILKTLLRCRNEKKRHRAVRLIFTI
                                                                                                                                                                                                          LLTIDRYLAVVHAVFALKARTVTFGVVTSVITWVVAVFASLPGIIFTRSQKEGLHYTCSS
                                                                                                                                                                                                                                                     LKSMTDIYLLNLAISDLFFLLTVPFWAHYAAAQWDFGNTMCQLLTGLYFIGFFSGIFFII
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                                                                                                                                                                                                                                                                                                                                 MDYQVSSPIYDINYYTSEPCQKINVKQIAARLLPPLYSLVFIFGFVGNMLVILILINCKR
                               GEKFRNYLLVFFQKHIAKRFCKCCSIFQQEAPERASSVYTRSTGEQEISVGL
                                                             MIVYFLFWAPYNIVLLLNTFQEFFGLNNCSSSNRLDQAMQVTETLGMTHCCINPIIYAFV
                                                                                                                           HFPYSQYQFWKNFQTLKIVILGLVLPLLVMVICYSGILKTLLRCRNEKKRHRAVRLIFTI
                                                                                                                                                                                        LLTIDRYLAVVHAVFALKARTVTFGVVTSVITWVVAVFASLPGIIFTRSQKEGLHYTCSS
                                                                                                                                                                                                                                                                                                                  MDYQVSSPIYDINYYTSEPCQKINVKQIAARLLPPLYSLVFIFGFVGNMLVILILINCKR
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Pred. No. 4.8
D; Mismatches
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No. 4.8e-200;
smatches 0;
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RESULT 12
AAW23834
ID AAW2:
XX
XX
AC AAW
DT 08
XX
XX
DT 08
XX
XX
XX
XX
KW
KW
KW
                   CC chemokine receptor 5; CCR5; G-protein coupled receptor;
                                      Human
                                                        08-JUN-1998
                                                                                          AAW23834
          immunodeficiency
                                      ဌ
                                      chemokine
                                                                                          standard;
                                                       (first
                                    receptor 5
                                                                                           Protein;
                                                     entry)
           virus;
                                                                                           371
            HIV;
                                      (CCR5)
           CD4;
                                      A127V variant.
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Best Local Similarity
Matches 351; Conserv
                                                                                                                                                   from an isolated cDNA clone (see AAT76919). The conservative variation should not affect the activity of CCRS. The susceptibility of human macrophages to HIV infection depends on cell surface expression of CD4 and CCR5. CCR5 is a member of the 7-transmembrane superfamily of G-protein coupled cell surface molecules. It plays an essential role in the membrane fusion step of infection by some HIV isolates. The establishment of stable, non-human cell lines and transgenic mammals having cells that coexpress human CD4 and CCR5 provides valuable tools for research of HIV infection. Antibodies that bind to CCR5, CCR5 variants, and CCR5-binding agents capable of blocking membrane fusion between HIV and target cells represent potential anti-HIV therapeutics for macrophage
                                                                                                                                                                                                                                                                                                                                                         CC cher
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Key
Domain
                                                                                                                       Sequence
                                                                                                                                                                                                                                                                                                             This protein sequence comprises an Alal27Leu variant of a novel
                                                                                                                                                                                                                                                                                                                                                                                          N-PSDB;
                                                                                                                                                                                                                                                                                                                                                                                                                       Alkhatib G, Berger EA, Bro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     28-MAY-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           04-DEC-1997.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Domain
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Domain
                                                                                                                                            tropic strains of HIV.
                                                                                                                                                                                                                                                                                      AAW23835) that has been designated CCR5.
                                                                                                                                                                                                                                                                                                                                   Example 1; Fig 1B; 70pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                      WPI;
                                                                                                                                                                                                                                                                                                                                                                                                                                                         (USSH ) US DEPT HEALTH & HUMAN SERVICES
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                                                                                                                                                                                                                                                                                                                                                        chemokine receptor 5 polypeptide sion between HIV and a target cell
             61
                                 20
                                                                                                                                                                                                                                                                                                  macrophage-selective CC
LKSMTDIYLLNLAISDLFELLTVPFWAHYAAAQWDFGNTMCQLLTGLYFIGFESGIFFII
                                MDYQVSSPIYDINYYTSEPCQKINVKQIAARLLPPLYSLVFIFGFVGNMLVILILINCKR
                                                                                                                         371
                                                                             Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                               96US-0018508
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    97WO-US09586
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /label-
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             162..190
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      'note- "transmembrane
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                                                                                      99.7%;
99.7%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  VII
                                                                                                                                                                                                                                                                                                                                                                                                                                    Broder CC,
                                                                             0
                                                                          Score 1836; DB 19;
Pred. No. 1.4e-199;
0; Mismatches 1;
                                                                                                                                                                                                                                                                                                chemokine receptor (see also
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                                                                                                                                                                                                                                                                                                                                                                    inhibit membrane
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                               Query Match
Best Local Sim
Matches 351;
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RESULT 13
ABB56342
ID ABB56
XX                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WPI; 200
N-PSDB;
                                                                                                                                                                The invention relates to G protein-coupled receptors (GPCRs) for which endogenous ligand has been identified. Non-endogenous constitutively activated versions of known GPCRs are used in the invention for the direct identification of candidate compounds as receptor agonists, inverse agonists or partial agonists. Such agonists are useful as therapeutic agents for diseases or disorders associated with GPCRs. The present sequence is a non-endogenous version of a known human GPCR.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Identifying agonists of G protein-coupled receptors (GPCRs) for use disease treatment; comprises contacting candidate compounds with versions of GPCRs -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       07-APR-2000; 2000US-195747P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Human; G protein-coupled constitutively activated
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                                                                                                                Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                               Claim 1; Page 277-278;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Lehmann-Bruinsma K,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  05-APR-2001; 2001WO-US11098
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DB; ABI97978.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    301
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h 99.7%;
Similarity 99.7%;
51; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   standard; Protein;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GEKFRNYLLVFFQKHIAKRFCKCCSIFQQEAPERASSVYTRSTGEQEISVGL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       MIVYFLFWAPYNIVLLLNTFQEFFGLNNCSSSNRLDQAMQVTETLGMTHCCINPIIYAFV
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GEKFRNYLLVFFQKHIAKRFCKCCSIFQQEAPERASSVYTRSTGEQEISVGL
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                                                                                                                352 AA;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      receptor; GPCR; non-endogenous; GPCR; agonist; disease.
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Score 1835; DB 22;
Pred. No. 1.7e-199;
D; Mismatches 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Lin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SEQ
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                                               Length
                                                        352;
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                                                                                                                                                                                                                                                                                                                                                                       for which
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              371
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MDYQVSSPIYDINYYTSEPCQKINVKQIAARLLPPLYSLVFIFGFVGNMLVILILINCKR

Indels

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Gaps

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RESULT 14
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ID AAM57
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20-MAR-2001;
20-MAR-2001;
20-MAR-2001;
                                                                                                                                                                                                                                                                                                                                                                ccR5;
 The for
                                                                                                                                                                                                                                                                                                                                                      drug
                             Example 3;
                                             Identifying CC chemokine receptor 5 binding compound for treating AIDS, comprises binding a molecule from library to a molecule having binding property corresponding to CCR5 and identifying bound molecule
                                                                                     N-PSDB;
                                                                                                                                                                                           21-MAR-2000;
21-MAR-2000;
                                                                                                                                                                                                                                                                                       Misc-difference
                                                                                                                                                                                                                                                                                                                                                                                            Human
                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAM52829
                                                                                                                Nestor
                                                                                                                                                                                                                       21-MAR-2001; 2001WO-US09155
                                                                                                                                                                                                                                                          WO200171346-A2
                                                                                                                                                                                                                                                                                                          Misc-difference
                                                                                                                                                                                                                                                                                                                   Key
                                                                                                                                                                                                                                                                                                                                    Homo
                                                                                                                                                                                                                                                                                                                                                                                                              22-FEB-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                  AAM52829;
                                                                                                                                   (CONS-)
 invention red
CC chemokine
                                                                                    2002-010610/01.
DB; ABA02318.
                                                                                                                                                                                                                                                                                                                                    sapiens
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       241
                                                                                                                                                                                                                                                                                                                                                               CC chemokine receptor 5; human; HIV infection; immunodeficiency virus; AIDS; acquired immunod
                                                                                                                                                                                                                                                                                                                                                                                           CCR5 Gln
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    61
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                                                                                                                'n
                                                                                                                                   CONSENSUS PHARM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         LLTIDRYLAVVHAVFALKARTVTFGVVTSVITWVVAVFASLPGIIFTRSQKEGLHYTCSS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  MIVYFLEWAPYNIVLLLNTFQEFFGLNNCSSSNRLDQAMQVTETLGMTHCCINPIIYAFV
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                           Fig 4B;
                                                                                                               Wilson
                                                                                                                                                    ; 2000US-190946P.
; 2000US-190996P.
; 2000US-191299P.
; 2001US-0813448.
; 2001US-0813651.
; 2001US-0813653.
                                                                                                                                                                                                                                                                                                                                                                                                              (first entry)
         relates to
                                                                                                                                                                                                                                                                                                                                                                                            55
                                                                                                                                                                                                                                                                                      /note=
58
                                                                                                                                                                                                                                                                                                        Location/Qualifiers 55
                                                                                                                                                                                                                                                                                                                                                       identification; variant.
                                                                                                                                                                                                                                                                             /note= "Encoded by AGC"
                                                                                                                                                                                                                                                                                                                                                                                            variant
                                                                                                                CJ,
                           50pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                   Protein;
                                                                                                                                                                                                                                                                                               "Glu replaces wild-type
                                                                                                                See
         Ø
method for 5 (CCR5).
                                                                                                                RH,
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for identifying a binding ). The method involves scre
                                                                                                                Hehir
                                                                                                                CA,
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RESULT 15
AAEO739
ID AAEO7
XX AEO7
AC AAEO7
AC AAEO7
XX 16-OC
XX 16-OC
XX Human
XX Human
KW Cytos
KW human
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KW r
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Best Local S
Matches 351
                                                                                                                                                                                   Human; G-protein chemokine receptor; CCR5; HDGNR10; inflammation; HIV; human immunodeficiency virus; antinicrobial; vasodilator; vulnerary; cytostatic; immunosuppressive; nootropic; neuroprotective; gene therapy; neurodegenerative disorder; Kaposi's sarcoma; autoimmune disease; rheumatoid arthritis; cancer; breast; ovary; adrenal gland; bone marrow; gastrointestinal tract; lung; liver; immune disorder; Addison's disease; haemolytic anaemia; autoimmune thyroiditis; diabetes mellitus; allergy; multiple sclerosis; ulcerative collits; Crohn's disease; wound healing; cardiovascular disorder; myocardial ischaemia.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Human G-protein chemokine receptor (CCR5) HDGNR10 protein
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1.7e-199;
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                                                                                                                                                                                                                                                                                                                                                                                                                                               pheumocytis carinii pneumonia or Raposi's sarcoma or defective or disorder may also be an infection disease (e.g. a viral infection such as an early stage HIV infection, a cytomegalovirus infection, or a serior an infection, a cytomegalovirus infection, or a neurodegenerative disorder. The disease or disorder may be associated with aberrant CCR5 syression, lack of CCR5 function. Aberrant CCR5 with aberrant CCR5 syression, lack of CCR5 function. CCR5 HDGNR10 protein is used as a food additive or preservative to increase or decrease storage capabilities. CCR5 HDGNR10 DNA are useful for chromosome identification and in gene therapy. CCR5 HDGNR10 DNA, protein, antibodies, agonists and antagonists are also useful in the disposels, treatment and prevention of cancer (breast, ovary, adrenal gland, bone, bone marrow, gastrointestinal tract, liver, lung, urogenital); immune disorders (Addison's disease, allergies, autoimmune thyroiditis, diabetes mellitus, Crohn's disease, multiple sclerosis, rheumatoid arthritis and ulcerative
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Matches 351;
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09-MAR-2000;
22-SEP-2000;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Isolated nucleic acid encoding a human G-protein chemokine receptor (CCR5) HDGNR10 polypeptide, useful for preventing or treating autoimmune diseases e.g. rheumatoid arthritis, hyperproliferative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WPI;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Example 40; Page 486-487; 495pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            disorders and neurodegenerative disorders
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Pred. No. 2.9e-199;
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  Score
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                                chemokine (C-C) re macrophage inflamm MIF-1 alpha recept chemokine (C-C) re diffusion receptor protein coupled probable G protein coupled probable G protein coupled interleukin-8 receinterleukin-8 rec
intersentide Y/pep
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453	460.5	461	461	461.5	464.5	466.5	468.5	468.5	469.5	471	472	473.5	474.5	490.5	496.5
24.6	25.0	25.0	25.0	25.1	25.2	25.3	25.4	25.4	25.5	25.6	25.6	25.7	25.8	26.6	27.0
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A;Molecule type: mRNA A;Residues: 1-352 <com1> A;Residues: 1-352 <com1> A;Residues: 1-352 <com1> A;Cross-references: GB:U57840; NID:g1502408; PIDN:AAB17071.1; PID:g1502409 A;Cross-references: Clone 8, endotoxin-stimulated peripheral blood monocytes R;Combadiere, C. R;Combadiere, C. R;Combadiere; H01541  A;Reference number: H01541  A;Accession: G02653 A;Retaus: translated from GB/EMBL/DDBJ A;Accession: G02653 A;Status: translated from GB/EMBL/DDBJ A;Molecule type: mRNA A;Residues: 1-89,'L',91-352 <com2> A;Residues: 1-89,'L',91-352 <com2> A;Residues: 1-89,'L',91-352 <com2> A;Residues: 1-89,'L',91-352 <com2> A;Residues: 1-80,'L',91-352 <com2< td=""><td>A;Recession: AS8834  A;Accession: AS8834  A;Accession: AS8834  A;Accession: AS8834  A;Accession: AS8834  A;Accession: AS8834  A;Compared with conceptual translation  A;Status: nucleic acid sequence not shown; not compared with conceptual translation  A;Compared with conceptual translation  A;Compared with conceptual translation  A;Compared with size and conference and conference and conference with size and conference and conference with size and conference and conference with size and conference of the conference and conference with size and conference conference with size and conference conference conference conference conference with size and conference confer</td><td>A;Residues: 1-352 <sam1> A;Cross-references: GB:X91492; NID:gl262810; PIDN:CAA62796.1; PID:gl262811 A;Cross-references: GB:X91492; NID:gl262810; PIDN:CAA62796.1; PID:gl262811 A;Cross-references: GB:X91492; NID:gl262810; PIDN:CAA62796.1; PID:gl262811 A; Sarag M:; Imai, T:; Rana, S:; Yl, Y:; Smyth, R.J.; Collman, R.G.; Doms, R.W.; Vassart, G.; Nature 382, 722-725, 1996 A;Title: Resistance to HIV-1 infection in caucasian individuals bearing mutant allole A;Reference number: S71808; MUID:96345670; PMID:8751444 A;Accession: S71808 A;Accession: S71808 A;Accession: S71808 A;Accession: S71808 A;Accession: S71808 A;Accession: S71808</sam1></td><td>RESULT 1  A43113  A43113  Chemokine (C-C) receptor 5 - human  N,Alternate names: C-C CKR-5; CCR5  N,Alternate names: C-C CKR-5; CCR5  C;Species: Homo sapiens (man)  C;Date: 12-Jul-1996 #sequence_revision 12-Jul-1996 #text_change 20-Jun-2000  C;Accession: A43113; S71808; A58834; A58832; G02653; A58833  C;Accession: A43113; S71808; A58834; A58832; G02653; A58833  R;Samson, M.; Labbe, O.; Mollereau, C.; Vassart, G.; Parmentier, M.  Biochemistry 35, 3362-3367, 1996  Biochemistry 35, 3362-3367, 1996  A;Title: Molecular cloning and functional expression of a new human CC-chemokine rece  A;Reference number: A43113; MUID:96241590; PMID:8639485  A;Molecular type: mRNA  A:Molecular type: mRNA  A:Molecular type: mRNA  A:Molecular type: mRNA</td><td>ALIGNMENTS</td></com2<></com2></com2></com2></com2></com2></com2></com2></com2></com2></com2></com2></com2></com2></com2></com2></com2></com2></com2></com2></com2></com2></com2></com2></com2></com2></com2></com2></com2></com2></com2></com2></com2></com2></com2></com2></com2></com2></com2></com2></com2></com2></com2></com2></com2></com1></com1></com1>	A;Recession: AS8834  A;Accession: AS8834  A;Accession: AS8834  A;Accession: AS8834  A;Accession: AS8834  A;Accession: AS8834  A;Compared with conceptual translation  A;Status: nucleic acid sequence not shown; not compared with conceptual translation  A;Compared with conceptual translation  A;Compared with conceptual translation  A;Compared with size and conference and conference and conference with size and conference and conference with size and conference and conference with size and conference of the conference and conference with size and conference conference with size and conference conference conference conference conference with size and conference confer	A;Residues: 1-352 <sam1> A;Cross-references: GB:X91492; NID:gl262810; PIDN:CAA62796.1; PID:gl262811 A;Cross-references: GB:X91492; NID:gl262810; PIDN:CAA62796.1; PID:gl262811 A;Cross-references: GB:X91492; NID:gl262810; PIDN:CAA62796.1; PID:gl262811 A; Sarag M:; Imai, T:; Rana, S:; Yl, Y:; Smyth, R.J.; Collman, R.G.; Doms, R.W.; Vassart, G.; Nature 382, 722-725, 1996 A;Title: Resistance to HIV-1 infection in caucasian individuals bearing mutant allole A;Reference number: S71808; MUID:96345670; PMID:8751444 A;Accession: S71808 A;Accession: S71808 A;Accession: S71808 A;Accession: S71808 A;Accession: S71808 A;Accession: S71808</sam1>	RESULT 1  A43113  A43113  Chemokine (C-C) receptor 5 - human  N,Alternate names: C-C CKR-5; CCR5  N,Alternate names: C-C CKR-5; CCR5  C;Species: Homo sapiens (man)  C;Date: 12-Jul-1996 #sequence_revision 12-Jul-1996 #text_change 20-Jun-2000  C;Accession: A43113; S71808; A58834; A58832; G02653; A58833  C;Accession: A43113; S71808; A58834; A58832; G02653; A58833  R;Samson, M.; Labbe, O.; Mollereau, C.; Vassart, G.; Parmentier, M.  Biochemistry 35, 3362-3367, 1996  Biochemistry 35, 3362-3367, 1996  A;Title: Molecular cloning and functional expression of a new human CC-chemokine rece  A;Reference number: A43113; MUID:96241590; PMID:8639485  A;Molecular type: mRNA  A:Molecular type: mRNA  A:Molecular type: mRNA  A:Molecular type: mRNA	ALIGNMENTS

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F:103-124/Domain: transmembrane #status predicted <TM3>
F:142-166/Domain: transmembrane #status predicted <TM4>
F:193-218/Domain: transmembrane #status predicted <TM5>
F:293-218/Domain: transmembrane #status predicted <TM6>
F:286-257/Domain: transmembrane #status predicted <TM7>
F:285-300/Domain: transmembrane #status predicted <TM7>
F:285-300/Domain: transmembrane #status predicted F:286/Binding site: carbohydrate (Asn) (covalent) #status predicted F:268/Binding site: carbohydrate (Asn) (covalent) #status predicted F:336,337,342/Binding site: phosphate (Ser) (covalent) #status p
                                                                                                                                                                                                                                                                                                               C;Date: 21-Feb-1995 #sequence_revision 05-Apr-1995 #text_change
C;Accession: JC2443; I38463
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               A; Map posit
C; Function:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      A; Accession: A58833
A; Molecule type: mRNA
A; Residues: 1-352 <RAP>
                                                                                              A; Molecule type: mRNA
A; Residues: 1-360 < YAM>
                                                                                                                                                                                                                                                                                                                                                                        N; Alternate names: C-C CKR-2; C; Species: Homo sapiens (man)
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A; Cross-references: GDB:12
                                     R;Charo,
                                                               A;Cross-references: DDBJ:D29984; NID:g531246; PIDN:BAA06253.1; PID:g531247
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                                     I.F.;
                                                                                                                                                                                                                                                                                                                                                                                                                                       (C-C) receptor 2, splice form
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            Acad.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 MIVYFLFWAPYNIVLLLNTFQEFFGLNNCSSSNRLDQAMQVTETLGMTHCCINPIIYAFV
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Myers, S.J.; Herman, A.; Fran
ad. Sci. U.S.A. 91, 2752-2756,
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OMIM:601373
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                                     Franci,
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                                  c.;
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                                     Connolly, A.J.;
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                                                                                                                                                                                                                   monocyte
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                                     Coughlin,
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N;Alternate names: C-C CKR-2; monocyte chemoattractant protein 1 receptor; monocyte C;Species: Homo sapiens (man)
C;Date: 16-Feb-1996 #sequence_revision 16-Feh-1006 #--
C;Accession: 138450
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   F;244-268/Domain: transmembrane *status predicted <TM5>
F;244-268/Domain: transmembrane *status predicted <TM6>
F;287-309/Domain: transmembrane *status predicted <TM7>
F;14/Binding site: carbohydrate (Asn) (covalent) *status F;113-190/Disulfide bonds: *status predicted
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           A;Title: Molecular cloning and functional expression of A;Reference number: A53477; MUID:94195821; PMID:8146186 A;Accession: 138463 A;Status: preliminary A;Molecule type: mRNA A;Residues: 1-360 <RES>A;Cross-references: EMBL:U03905; NID:9472557; PIDN:AAA19C;Genetics:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                A; Map position: 3p21-3p21
c; Superfamily: vertebrate rhodopsin
c; Superfamily: vertebrate splicing; G protein-coupled rec
c; Seywords: alternative splicing; G protein-coupled rec
r; 43-70/Domain: transmembrane #status predicted <TM2>
r; 81-100/Domain: transmembrane #status predicted <TM2>
r; 115-136/Domain: transmembrane #status predicted <TM3:
r; 154-178/Domain: transmembrane #status predicted <TM4:
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A; Cross-references:
                                                                                            A;Title: Molecular cloning and functional expression of A;Reference number: A53477; MUID:94195821; PMID:8146186 A;Accession: I38450
A;Status: preliminary
A;Molecule type: mRNA
A;Residues: 1-374 <RES>
A;Cross-references: EMBL:U03882; NID:9472555; PIDN:AAA19
A;Gene: GDB:CMKBR2
A;Cross-references: GDB:337364;
A;Map postition: 3p21-3p21
C;Superfamily: vertebrate rhodor
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                                                                         A; Cross-references: C; Genetics:
                                                                                                                                                                                                                                      R;Charo, I.F.; Myers, S.J.; Herman, Proc. Natl. Acad. Sci. U.S.A. 91, 27
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75.5%;
                                       OMIM:601267
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                                                                                                                                                                                                                                        n, A.; Franci, C.;
2752-2756, 1994
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Pred. No. 2
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                                                                                                  PIDN: AAA19119.1;
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RESULT 4
A45177
chemokine
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N;Alternate names: C-C CKR-1; macrophage inflammatory protein-1-alpha receptor
C;Species: Homo sapiens (man)
C;Date: 30-Sep-1993 #sequence_revision 30-Sep-1993 #text_change 13-Aug-1999
C;Accession: A45177; I55671
R;Neote, K; Differgorio, D.; Mak, J.Y.; Horuk, R.; Schall, T.J.
Cell 72, 415-425, 1993
A;Title: Molecular cloning, functional expression, and signaling characteristic A;Reference number: A45177; MUID:93161416; PMID:7679328
A;Accession: A45177
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F:154-178/Domain: transmembrane #status predicted <TM4>
F:208-226/Domain: transmembrane #status predicted <TM5>
F:244-265/Domain: transmembrane #status predicted <TM6>
F:244-265/Domain: transmembrane #status predicted <TM6>
F:292-309/Domain: transmembrane #status predicted <TM7>
F:14/Binding site: carbohydrate (Asn) (Covalent) #status predicted F:32-277,113-190/Disulfide bonds: #status predicted
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                A;Gene: GDB:CMKBR1; CMKR-1
A;Crose references: GDB:138446; OMI
A;Map position: 3p21-3p21
C;Superfamily: vertebrate rhodopsin
                                                                                                                                                                            R;Gao, J.
J. Exp. Med. 177, 1421-1427, 1993
J. Exp. Med. 177, 1421-1427, 1993
A;Title: Structure and functional expression of the human macrophage inflammatory 1 alph A;Reference number: I55671; MUID:93240122; PMID:7683036
A;Accession: I55671
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                                                                                        A;Cross-references:
C;Genetics:
                                                                                                                         A;Status: preliminary; translated from GB/EMBL/DDBJ
A;Molecule type: mRNA
A;Residues: 1-355 <RES>
                                                                                                                                                                                                                                                                    A;Rosiduce; 1-355 <NEO>
A;Rosiduce; 1-355 <NEO>
A;Cross-references: GB:L10918; NID:g292416;.PIDN:AAA36543.1;
A;Experimental source: HL6O cells
A;Experimental source: GB:L100 Cells
A;Note: sequence extracted from NCBI backbone (NCBIP:124876)
                                                                                                                                                                                                                                                                                                                                              A; Molecule type: mRNA
                                                                                                                                                                                                                                                                                                                                                             A; Status: nucleic acid sequence
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Best Local Similarity 76.3
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AIH---
                                                                                                          GB:L10918; NID:g292416; PIDN:AAA36543.1;
bond; G
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protein-coupled receptor;
                                                      OMIM: 601159
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Pred. No. 8.2e-94;
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glycoprotein; phosphoprotein;
                                                                                                          PID: g292417
                                                                                                                                                                                                                                                                                                          PID:g292417
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                IVHAVFALRARTVTLGIITSIITWALAILASMPALYFFKAQWEFTHRTCSPHFPYKSLKQ
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macrophage inflammatory protein-1 alpha receptor - mouse (;Species: Mus musculus (house mouse)
C;Date: 02-Jul-1996 #sequence_revision 02-Jul-1996 #text_char
C;Accession: I49339
R;Gao, J.L.; Murphy, P.
J. Biol. Chem. 270, 17494-17501, 1995
A;Title: Cloning and differential tissue-specific expression
A;Reference number: I49339; MUID:95340546; PMID:7542241
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F;288-305/Domain: transmembrane #status predicted <TM7>
F;288-305/Domain: transmembrane #status predicted <TM7>
F;57Binding site: carbohydrate (Asn) (covalent) #status predicted F;24-273,106-183/Disulfide bonds: #status predicted F;345/Binding site: phosphate (Ser) (covalent) (by casein kinase
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F;147-171/Domain: transmembrane #status predicted <TM4>
F;205-223/Domain: transmembrane #status predicted <TM5>
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C;Superfam1ly: vertebrate rhodopsin
                                                                                                                                                                                                                                                                                                                                                                                                              A; Molecule type: DNA
A; Residues: 1-355 < RES>
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nes 190; Conserv
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197; Conserv
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VVHAVFALKARTYTFGVVTSVITWVVAVFASLPGIIFTRSQKEGLHYTCSSHFPYSQYQF 189
                                                                                                                                                               EFDYGDSTPCQKTAVRAFGAGLLPPLYSLVFIIGVVGNVLVILVLMQHRRLQSMTSIYLF
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llarity 55.6%;
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                                                                                                                                                                                                                                                                  55;
                                                                                                                                                                                                                                                             Score 1007.5; DB 2;
pred. No. 6.2e-76;
5; Mismatches 94;
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RESULT 7
                                                                                          N;Alternate names: C-C CKR-3
C;Species: Homo sapiens (man)
C;Date: 21-Dec-1996 #sequence_revision
C;Accession: G02436; A57237
R;Ponath, P.D.
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J. Biol. Chem. 270, 17494-17501, 1995
A;Title: Cloning and differential tissue-specific expression A;Reference number: 149339; MUID:95340546; PMID:7542241
A;Accession: 149341
   A; Molecule type: DNA
A; Residues: 1-355 <PO
                               A; Reference number:
A; Accession: G02436
A; Status: translate
                                                              submitted to the EMBL Data Library, A; Reference number: H01272
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Matches
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;Species: Mus musculus (house mouse)
;Date: 02-Jul-1996 #sequence_revision
                               Status: translated from
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Pred. No. 2e-75;
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A;Cross-references: GB:X85740;
A;Note: source clone K5-5
                            A; Molecule type: mRNA
A; Residues: 1-360 < POW>
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RESULT 8
A57160.

chemokine (C-C) receptor 4 - human
chemokine (C-C) receptor 4 - human
N;Alternate names: C-C CKR-4
C;Species: Homo sapiens (man)
C;Date: 10-Nov-1995 #sequence_revision 10-Nov-1995 #text_cha
C;Accession: A57160
R;Power, C-A; Meyer, A; Nemeth, K; Bacon, K.B.; Hoogewerf
J. Biol. Chem. 270, 19495-19500, 1995
A;Title: Molecular cloning and functional expression of a n
A:Reference number: A57160; MUID:95370289; PMID:7642634
A:Reference number: A57160; MUID:95370289; PMID:7642634
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A;Cross-references: GDB:579624; OMIM:601268

A;Map position: 3p21-3p21

C;Superfamily: vertebrate rhodopsin
C;Keywords: G protein-coupled receptor; glycoprotein; phosp
F;36-60/Domain: transmembrane #status predicted <TM1>
F;71-91/Domain: transmembrane #status predicted <TM2>
F;108-129/Domain: transmembrane #status predicted <TM3>
F;108-129/Domain: transmembrane #status predicted <TM4>
F;205-223/Domain: transmembrane #status predicted <TM4>
F;205-223/Domain: transmembrane #status predicted <TM5>
F;240-261/Domain: transmembrane #status predicted <TM5>
F;240-261/Domain: transmembrane #status predicted <TM5>
F;240-261/Domain: transmembrane #status predicted <TM5>
F;240-273/105-183/Disulfide bonds: #status predicted <TM7>
F;24-273/Domain: transmembrane #status predicted <TM5>
F;240-273/105-183/Disulfide bonds: #status predicted <TM7>
F;24-273/Tomain: transmembrane #status predicted <TM7>
F;240-273/Tomain: transmembrane #status predicted <TM5>
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A; Restidues: 1-106,'N',108-275,'S',277-280,'R',282-355 <COM>
A; Cross-references: GB:U28694; NID:g1199579; PIDN:AAC50469.
A; Note: the translated sequence in GenBank entry HSU28694, C; Genetics:
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J. Biol. Chem. 270, 16491-16494, 1995
A;Title: Cloning and functional expression of a human eosinophil
A;Reference number: A57237; MUID:95348056; PMID:7622448
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R;Combadiere, C.; Al
J. Biol. Chem. 270,
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A;Status: nucleic acid sequence not shown
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Pred. No. 5.6e-70;
3; Mismatches 90
                                                                                                                                                               Bacon, K.B.; Hoogewerf, A.J.; Proudfoot,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           353
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NID: g1370103;

PIDN:CAA59743.1;

PID:9971452

conceptual translation

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chemokine (C-C) receptor 4 - mouse
C;Species: Mus musculus (house mouse)
C;Date: 08-Mar-1996 #sequence_revision 19-Apr-1996 #text_change 20-Jun-2000
C;Accession: JC4587
R;Hoogewerf, A.J.; Black, D.; Proudfoot, A.E.I.; Wells, T.N.C.; Power, C.A.
Blochem. Biophys. Res. Commun. 218, 337-343, 1996
A;Title: Molecular cloning of murine CC CKR-4 and high affinity binding of chemokines td A;Reference number: JC4587; MUID:96136324; PMID:8573157
A;Accession: JC4587
A;Molecula type: mRNA
A;Residues: 1-360 <HOO>
A;Cross-references: EMBI:X90862; NID:g1167851; PIDN:CAA62372.1; PID:g1167852
A;Experimental source: thymus
C;Genetics:
A;Gene: Cc ckr-4
C;Superfamily: vertebrate rhodopsin
C;Reywords: glycoprotein; phosphoprotein; receptor; thymus
F;2,183,194/Binding site: carbohydrate (Asn) (covalent) (by casein kinase I) #status predicted
F;321/Binding site: phosphate (Ser) (covalent) (by protein kinase C) #status predicted
F;321/Binding site: phosphate (Thr) (covalent) (by protein kinase C) #status predicted
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F;40-65/Domain: transmembrane #status predicted <TM2>
F;112-133/Domain: transmembrane #status predicted <TM3>
F;111-175/Domain: transmembrane #status predicted <TM4>
F;101-175/Domain: transmembrane #status predicted <TM5>
F;201-206/Domain: transmembrane #status predicted <TM5>
F;201-206/Domain: transmembrane #status predicted <TM5>
F;201-308/Domain: transmembrane #status predicted <TM7>
F;301/Binding site: phosphate (Ser) (covalent) (by protein kinase C) #status predicted F;301/Binding site: carbohydrate (Asn) (covalent) (by protein kinase C) #status predicted F;301/Binding site: phosphate (Thr) (covalent) (by protein kinase C) #status predicted F;301/Binding site: phosphate (Thr) (covalent) (by protein kinase C) #status predicted F;301/Binding site: phosphate (Thr) (covalent) (by protein kinase C) #status predicted F;301/Binding site: phosphate (Thr) (covalent) (by protein kinase C) #status predicted F;301/Binding site: phosphate (Thr) (covalent) (by protein kinase C) #status predicted F;301/Binding site: phosphate (Thr) (covalent) (by protein kinase C) #status predicted F;301/Binding site: phosphate (Thr) (covalent) (by protein kinase C) #status predicted F;301/Binding site: phosphate (Thr) (covalent) (by protein kinase C) #status predicted F;301/Binding site: phosphate (
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A;Gene: GDB:CMKBR4
A;Gene: GDB:CMKBR4
A;Cross-references: GDB:677463
A;Map position: 3p21-3p21
C;Superfamily: vertebrate rhodopsin
C;Keywords: G protein-coupled recep
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Pred. No. 1.3e
68; Mismatches
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906;
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C; Species: eq
C; Date: 10-Ap
C; Accession: (
R; Telford, E.)
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A; Residues: 1-383 <TEL>
A; Cross-references: GB:U20824; NID:g695172;
C; Superfamily: vertebrate rhodopsin
C; Keywords: G protein-coupled receptor
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Best Local S
Matches 157
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Species: equine herpesvirus 2
Date: 10-Apr-1996 #sequence_revision
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352
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KXITQLERTCRGPLVLCKHCDFLQVYSADMSSSSYTQSTVDHD
                                                   GFWTPYNVVLFLETLVELEVLQDCTLERYLDYAIQATETLGFIHCCLNPVIYFFLGEKFR
                                                                          LFWAPYNIVLLLNTFQEFFGLNNCSSSNRLDQAMQVTETLGMTHCCINPIIYAFVGEKFR
                                                                                                                  QYQFWKNFQTLKIVILGLVLPLLVMVICYSGILKTLLRCRNEKKRHRAVRLIFTIMIVYF
|| :|:| :|||::|| :|:| | |:|| |:||| :|::::
|S-TTWKYLSSLEINVLGLLIPLGIMLFWYSMIIRTLQHCKNEKK-NRAVRMIFGVVVLFL
                                                                                                                                                                           NYLLVFFQKHIAKR-FCKCCSIFQQEAPERASSYYTRSTGEQE
                                                                                                                                                                                                                                                                                             VYNSYYFYESMPKPCTKEGIKAFGEVFLPPLYSLVFLLGLFGNSVVVLVLFKYKRLKSMT
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); Mismatches 97;
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C;Accession: S55594
R;Telford, E.A.R.; Watson, M.S.; Aird, H.C.; Perry, J.; J. Mol. Biol. 249, 520-528, 1995
A;Title: The DNA sequence of equine herpesvirus 2.
A;Reference number: S5594; MUID:99302501; PMID:7783207
A;Accession: S55594
A;Status: preliminary; nucleic acid sequence not shown NLAISDLEELLTVPEWAHYAAA--OWDEGNTMCQLLTGLYEIGFESGIFEIILLTIDRYL 128 LVFFQKHIAKRFCKCCSIFQ----QEAPER APYNIVLLLNTFQEFFGLNNCSSSNRLDQAMQVTETLGMTHCCINPIIYAFVGEKFRNYL AVVHAVFALKARTVTFGVVTSVITWVVAVFASLPGIIFTRSQKEGLHYTCSSHFPYSQYQ YHFFHTYVAIYLCKYIPFLSGDGEGKEGPTR AVVYAVTALRERTVTCGIVTCVCTWFLAGLLSLPEFFFHGHQDDNGRVQCDPYYPEMSTN TPYNIVLLLSTFHATLLNLQCALSSNLDMALLITKTVAYTHCCINPVIYAFVGEKFRRHL Score 829; DB Pred. No. 3.9e 64; Mismatches 19-Apr-1996 herpesvirus PIDN: AAC13788.1; DB 2; .9e-61; #text\_change 13-Aug-1999 Length Indels Davison, PID:9695173 8, Gaps 232 188 112 351 308 172 291 248

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C;Accession: I49340
C;Accession: I49340
R;Gao, J.L.; Murphy, P.M.
J. Biol. Chem. 270, 17494-17501, 1995
J. Biol. Chem. 270, 17494-17501, 1995
A;Title: Cloning and differential tissue-specific expression
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       A;Reference number: 149339; MUID:95340546; PMID:/54
A;Accession: 149340
A;Status: preliminary; translated from GB/EMBL/DDBJ
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C;Date: 02-Jul-1996 #sequence_revision 02-Jul-1996 #text_change 13-Aug-1999
                                                                                                                                                                                                                                                                                                                  R; Zaballos, A.; Varona, R.; Gutierrez, J.; Lind, P.; Marquez, G
Blochen. Blophys. Res. Commun. 227, 846-853, 1996
A;Ttle: Molecular cloning and RNA expression of two new human
A;Reference number: JC5067; MUID:97040707; PMID:8886020
                                                                                                                                                                                                                                                                                                                                                                                                     G protein-coupled receptor CKR-L1 - human
N;Alternate names: chemokine receptor-like protein TER1; GPR-CY6
C;Species: Homo sapiens (man)
C;Date: 31-Jan-1997 #sequence_revision 31-Jan-1997 #text_change 21-Jul-2000
C;Accession: JC5067; G02776; G02387
C;Accession: JC5067; G02776; G02387
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A; Residues: 1-356 < RES>
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                                                                                                                                                        R;Napolitano, M.; Zingoni, A.; Berne submitted to the EMBL Data Library, A;Reference number: H01714
                                                                                                                                                                             A;Cross-references: EMBL:279782; NID:g1668735; R;Napolitano, M.; Zingoni, A.; Bernardini, G.; submitted to the EMBL Data Library, June 1996
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A; Residues: 1-35
                                                                                       A; Molecule type: DNA
                                                                                                               A;Status:
                                                                                                                                  A; Accession: G02776
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Best Local
                                        Cross-references: EMBL:U62556; NID:g1468978; PID:g1468979
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Cross-references: EMBL:U28405; NID:g881549; PIDN:AAA89154.1;
                                                                  Residues: 1-355 <NAP>
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                                                                                                                                                                                                                                                       1 - 355
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   LRNMTSIYLFNLAISDLVFLSTLPFWVDYIMKGDWIFGNAMCKFVSGFYYLGLYSDMFFI
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    VGKRFRKYLWQLFRRHTAITLPQWLPFLSEDRAQRASA-RLPSTVEIETSADL 356
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               VGEKFRNYLLVFFQKHIAKRFCKCCSIFQQEAPERASSVYTRSTGEQEISVGL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ITLLFFLLLAPYYLAAFVSAFEDVLFTPSCLRSQQVDLSLMITEALAYTHCCVNPVIYVF
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                                                                                                                                                                                                                                                                            DNA
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Data Library,
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                                                                                                                  GB/EMBL/DDBJ
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Pred. No. 9.
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January 1996
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                                                                                                                                                                                                     PIDN:CAB02142.1;
Spinetti, G.; Roc
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                                                                                                                                                                                                                                                                                                                                              chemokine receptor-like
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RESULT 13
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A; Accession: G02387
A; Status: preliminar
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                C; Superfamily: vertebrate rhodopsin
C; Keywords: G protein-coupled recep
                                                                                                                                                                                                          Neurosci. Lett. 169, 85-89, 1337
Neurosci. Lett. 169, 85-89, 1337
A;Title: cDNA cloning of a G-protein-coupled
A;Paference number: I58186; MUID:94323113; P)
                                                                                                                                                                                                                                                                                                                 probable G protein-coupled receptor - rat
C;Species: Rattus norvegicus (Norway rat)
C;Date: 26-Jul-1996 #sequence_revision 26
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A; Cross-references: GDB: 6053
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                C;Comment: This protein belongs
C;Genetics:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              A; Molecule type: DNA
                                                                                                                                          A; Molecule type: mRNA
A; Residues: 1-354 < RES>
                                                                                                                                                                                                                                                                             C; Accession: 1581
R; Harrison, J.K.;
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                                                                                                                       A; Cross-references:
                                                                                                                                                                                                A; Accession: I58186
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ;108-129/Domain: transmembrane #status predicted <TM3>;147-171/Domain: transmembrane #status predicted <TM4>;200-222/Domain: transmembrane #status predicted <TM5>;239-260/Domain: transmembrane #status predicted <TM6>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              , neyworus: 6 procein-coupled receptor; transmembrane protein; 36-63/Domain: transmembrane #status predicted <TM1>;73-94/Domain: transmembrane #status predicted <TM2>;108-109/Domain: transmembrane #status predicted <TM2>;
                                                                               Superfamily: vertebrate rhodopsin; Superfamily: vertebrate rhodopsin
                                                                                                                                                                               Status: preliminary; translated
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           176 YTCSSHFPYSQYQFWKNFQTLKIVILGLVLPLLVMVICYSGILKTLLRCRNEKKRHRAVR
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    61 VVCKKLRSITDVYLLNLALSDLLFVFSFPFQTYYLLDQWVFGTVMCKVVSGFYYIGFYSS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1 MDYQVSSPIYDI-NYY----TSEPCQKINVKQIAARLLPPLYSLVFIFGFVGNMLVILIL
                       Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LIFTIMIVYFLFWAPYNIVLLLNTFQEFFGLNNCSSSNRLDQAMQVTETLGMTHCCINPI 295
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         INCKRIKSMTDIYLLNLAISDLFFLLTVPFWAHYAAAQWDFGNTMCQLLTGLYFIGFFSG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        IYAFYGEKFRNYLLYFFQKHIAKRFCKCCSIFQ-------QEAPERASSVYTRSTGEQEI 348
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            LQCYS-FYNQQTLKWKIFTNFKMNILGLLIPFTIFMFCYIKILHQLKRCQNHNKT-KAIR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       MFFITLMSVDRYLAVVHAVYALKVRTIRMGTTLCLAVWLTAIMATIPLLVFYQVASEDGV
                                                                                                                                                                                                                                                                                                                                                                                                                                                               IYAFVGEKFKKHLSEIFQK-----SCSQIFNYLGRQMPRESCEKSSSCQQHSSRSSSV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              LVLIVVIASLLFWVPFNVVLFLTSLHSMHILDGCSISQQLTYATHVTEIISFTHCCVNPV
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    Conservative
                                                                                                                                                                                                                                                                               Barber, C.M.; Lynch, K.R.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          EMBL: U45983;
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                                                                                                                     EMBL: U04808; NID: g2558635; PIDN: AAB87093.1; PID: g439861
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                    38.7%;
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Score 712; DB
Pred. No. 1.7e
59; Mismatches
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Pred. No. 2.4
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                                                                                                                                                                                                                         receptor expressed MID:8047298
                  DB 2;
.7e-51;
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SSPIYDINYY----TSEPCQKINVKQIAARLLPPLYSLVFIFGFVGNMLVILILINCKRL

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R;Fan, P.; Kyaw, H.; Su, K.; Zeng, Z.; Augustus, M.; Carter, K.C.; L1, Y. Blochem. Blophys. Res. Commun. 243, 264-268, 1998
A:Title: Cloning and characterization of a novel human chemokine receptor. A;Reference number: JC5942; MUID:98139902; PMID:9473515
A;Accession: JC5942
A;Status: preliminary
A;Status: preliminary
A;Hesidues: 1-344 <FRAN>
A;Gross-references: GB:U97123; NID:92897070; PIDN:AAC39595.1; PID:92897071
C;Superfamily: vertebrate rhodopsin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             C;Species: Homo sapiens (man)
C;Datc: 16-Jul-1999 #sequence_revision 16-Jul-1999 #text_change 21-Jul-2000
C;Accession: JC5942
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JC5942
chemokine receptor - human
C;Species: Homo sapiens (ma
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                                                                                                                               FOTLKIVILGLVLPLLVMVICYSGILKTLLRCRNEKKRHRAVRLIFTIMIVYFLFWAPYN
                                                                                                                                                                                                                                 LCELLTLPEWAHAG-----GDPMCKILIGLYEVGLYSETEFNCLLTVQRYLVFLHKGNF 138
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SV 350
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       EKFRNYLLVFFQKHIAKRFCKCCSIF-------QQEAPERASSVYTRSTGEQEI 348
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     VVFFLFWTPYNIVIFLETLKFYNFFPSCGMKRDLRWALSVTETVAFSHCCLNPFIYAFAG
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                           QKHIAKRFCKCCSIFQQEAPERASSVYTRSTGEQE 347
                                                                                                                                                                          FSARRRYPCGIITSYLAWYTAILATLPEYVVYKPQMEDQKYKCAFSRTPFLPADETFWKH
                                                                                                                                                                                           ALKARTVTEGVVTSVITWVVAVFASLPGIIFTRSQKEGLHYTCS-SHEPY--SQYQFWKN
                                                                                                                                                                                                                                                                LFFLLTVPFWAHYAAAQWDFGNTMCQLLTGLYFIGFFSGIFFIILLTIDRYLAVVH-AVF
                                                                                                                                                                                                                                                                                                                       SEPCOKINVKQIAARLLPPLYSLVFIFGFVGNMLVILILINCKRLKSMTDIYLLNLAISD
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                                                       TAFFLSTFKEHFSLSDCKSSYNLDKSVHITKLIATTHCCINPLLYAFLDGTFSKYL----
                                                                                  IVLLLNTFQEFFGLNNCSSSNRLDQAMQVTETLGMTHCCINPIIYAFVGEKFRNYLLVFF 312
                                                                                                                 FLTLKMNISVLVLPLFIFTFLYVQMRKTL---RFREQRYSLFKLVFAIMVVFLLMWAPYN
                                                                                                                                                                                                                                                                                                                                                    36.6%;
nilarity 40.9%;
Conservative 6/
CRCFIIL-RSNTPLQPRGQSAQGTSREE
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%; Pred. No. 2.8e-48;
64; Mismatches 108;
                                                                                                                                                                                                                                                                                                                                                                                 Length 344;
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Search completed: June Job time: 34.2822 secs

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2003, 15:22:40

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F;104-125/Domain: transmembrane #status predicted <TM3>F;146-165/Domain: transmembrane #status predicted <TM4>F;147-217/Domain: transmembrane #status predicted <TM5>F;230-254/Domain: transmembrane #status predicted <TM6>F;275-296/Domain: transmembrane #status predicted <TM7>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            A; Molecule type: mRNA
A; Residues: 1-355 < RAP>
A; Residues: 1-355 < RAP>
A; Cross-references: GB: U20350; NID: g665580; PIDN: AAA91783.1; PID: g665581
A; Experimental source: peripheral blood mononuclear cell
C; Comment: This protein is a cell-surface receptor which recognizes extracellular sig
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         C;Superfamily: vertebrate rhodopsin
C;Reywords: G protein-coupled receptor; lymphokine;
F;35-57/Domain: transmembrane #status predicted <TM.
F;66-88/Domain: transmembrane #status predicted <TM.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 A; Title: The orphan G-protein-coupled receptor-encoding A; Reference number: JC4304; MUID: 96011651; PMID: 7590284 A; Accession: JC4304
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              N;Alternate names: V28 protein
C;Species: Homo sapiens (man)
C;Date: 16-Nov-1955 #sequence_revision 08-Feb-1996 #text_change 19-May-2000
C;Accession: JC4304
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Gene 163, 295-299,
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Best Local (
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313
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                                                                                                                                                                                                                                                    LIEVATLPEWTHYLINEKGLHNAMCKETTAFFFIGFFGSIFFITVISIDRYLAIVLAANS
                                                                                                                                                                                                                                                                                                                               LFELLTVPFWAHYAAAQWDFGNTMCQLLTGLYFIGFESGIFFIILLTIDRYLAVVHAVFA 136
                                                                                                 LNTFQEFFGLNNCSSSNRLDQAMQVTETLGMTHCCINPIIYAFVGEKFRNYLLVFFQKHI 316
                                                                                                                                                                                        KIVILGLVLPLLVMVICYSGILKTLLRCRNEKKRHRAVRLIFTIMIVYFLFWAPYNIVLL
                                                                        LETLKLYDFFPSCDMRKDLRLALSVTETVAFSHCCLNPLIYAFAGEKFRRYLYHLYGKCL
                                                                                                                                                     ETNELGFLLPLLIMSYCYERIIQTLFSCKNHKKA-KAIKLILLVVIVFFLFWTPYNVMIF
                                                                                                                                                                                                                                MNNRTVQHGVTISLGVWAAAILVAAPQFMFTK-QKEN---ECLGDYPEVLQEIWPVLRNV
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                                                                                                                                                                                                                                                                                                                                                                                                                                                               36.4%;
ilarity 42.9%;
Conservative 55
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     55;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Score 670.5; DB 2;
Pred. No. 4.6e-48;
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GenCore version 5.1.6 Copyright (c) 1993 - 2003 Compugen Ltd.
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OM protein - protein search, using sw model

Run on: June 3, 2003, 15:09:40 ; Search time 16.1411 Seconds (without alignments) 904.503 Million cell updates/sec

Title: Perfect score: Sequence: US-09-939-226-5 1841 1 MDYQVSSPIYDINYYTSEPC.....ERASSYYTRSTGEQEISVGL 352

Scoring table: BLOSUM62 Gapop 10.0., Gapext 0.5

Scarched: 112892 seqs, 41476328 residues

Total number of hits satisfying chosen parameters: 112892

Minimum DB seq length: 0
Maximum DB seq length: 200000000

Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries

SwissProt\_40:\*

Database :

Prod. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

# SUMMARIES

Score	Query Match L	ength	B	ID	cription
1841	100.0	352	μ;	CKR5_HUMAN	P51681 homo sapien
1835	99.7	352	-	CKR5_PANTR	pan t
1830	99.4	352	<b>_</b>	CKR5_PONPY	pong
1825	•	352	<u> </u>	CKR5_GORGO	9 gorill
1821		352	_	CKR5_TRAPH	trachypi
1816	•	352	_	CKR5_PAPHA	_
1816		352	<b>–</b>	CKR5_TRAFR	trach
1815		352	_	CKR5_PYGBI	o p
1815	•	352	-	CKR5_PYGNE	
1814	•	352	<b>ب</b>	CKR5_HYLLE	097883 hylobates 1
1813	•	352	μ	CKR5_MACMU	
1803	•	352	<b>j</b>	CKR5_CERTO	O62743 cercocebus
1790	٠	352	-	CKR5_CERAE	P56493 cercopithec
1556	٠	354	-	CKR5_MOUSE	
1547	•	354		1	008556 rattus norv
1370.5	•	373	-	CKR2_MOUSE	
1363.5	•	373	<u> </u>	CKR2_RAT	055193 rattus norv
1349	•	360	-	CKR2_MACMU	
1224	•	374	ب	CKR2_HUMAN	P41597 homo sapien
1055	٠	355	-	CKR1_HUMAN	
1017.5	٠	359	_	CKR3_MOUSE	mus m
1015.5	•	359	_	CKR3_RAT	O54814 rattus norv
1009	•	355	_	CKR1_MACMU	macaca
1004.5	•	355	_	CKR1_MOUSE	P51675 mus musculu
949	•	358	_	CKR3_CAVPO	Q9z213 cavia porce
938.5	•	355	_	CKR3_HUMAN	homo s
929.5	•	355	-	CKR3_MACMU	macac
919	•	360		CKR4_HUMAN	5
911.5	•	355	ب	CKR3_CERAE	
906	٠	360	μ	CKR4_MOUSE	=
799.5	43.4	356	μ	CKRV_MOUSE	mug
746.5	40.5	355	-	KRB	168
737	40.0	356	-	CKR8_MACMU	097665 macaca mula
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CKR6_HUMAN	CKD6_RAT CKD6_HUMAN CKR7_HUMAN	CKR9_HUMAN CKR9_MOUSE CKD6_MOUSE	CKR8_MOUSE C3X1_RAT C3X1_MOUSE C3X1_HUMAN
			P56484 mus musculu P35411 rattus norv Q9z0d9 mus musculu P49238 homo sapien

# ALIGNMENTS

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J. Virol. 71:8642-8656(1997).		implicate specific amino acids in infections by similar and human	"DO] ymorthiama in the Crea general of Africas grees mosters and miss	! •	SEQUENCE FROM N.A.	[5]	Submitted (MAY-1997) to the EMBL/GenBank/DDBJ databases.	Watanabe M., Doggett N., Garcia D., Sagripanti J.L.;	Solinsky K.A., Desilva U., Diaz-Perez S., Zhou X., Yu Y.,		Muzny D., Chen C.N., Evans C., Fitzgerald M., See L.H., Tang M.,		Parnell L., Dedhia N., Ansari A., Mardis E.	W.R., Wilson R., Chen E., Gibbs R., Zuo L., Johnson	UENCE	[4]	J. Leukoc. Biol. 60:147-152(1996).	PANTES :	ň	Combadiere C., Ahuja S.K., Tiffany H.L., Murphy P.M.;	MEDLINE=96295970; PubMed=8699119;	SEQUENCE FROM N.A.	J. Biol. Chem. 271:17161-17166(1996).	CC chemokine receptor (CCR5) for RANTES, MIP-lbeta, and MIP-lalpha.";	"Molecular cloning and functional characterization of a novel human	Raport C.J., Gosling J., Schweichart V.L., Grav P.W., Charo I.F.:	MEDLINE-96291862; PubMed-8663314;	GEOTIENCE EDOM N P	Biochemistry 35:3362-3367(1996).		l expression of a new human	, Vassart G	MEDLINE-96241590; PubMed-8639485;	SEOTIENCE ENOW N P		ia; Primates; Catarrhini; Hominidae;	ryota; Metazoa; Chordata;	Homo saplens (Human).	(HIV-1 IUSION CO-TECEPTOT) (CHEMRI3) (CDI95 ANTIGEN).	C-C chemokine receptor type 5 (C-C CKR-5) (CC-CKR-5) (CCR-5) (CCR5)		01-OCT-1996 (Rel. 34, Last sequence update)		014701; 014702; 014703; 014704; 014705; 014706;	014692; 014693; 014695; 014696;	_HUMAN S

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SEQUENCE FROM N.A., AND POLYMORPHISMS.
MEDLINE-98022612; PubMed-9359654;
%hang L., Carruthers C.D., He T., Huar
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Ho D.I
 EMBL;
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                                                                                                                                                                                                                                                                                                                                                                                                          "HIV-1 entry into CD4+ cells CC-CKR-5.";
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"HIV-1
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MEDLINE-96260018; PubMed-8649512;
Dragic T., Litwin V., Allaway G.P.,
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Magierowska M., Barre-Sinoussi F., Issa
                                                                               entities requires
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                                                                                                             s SWISS-PROT entry is copyright. It is produced through ween the Swiss Institute of Bioinformatics and the EN European Bioinformatics Institute. There are no rest
                                                                                                                                                                                                                      WIP-1-BETA AND RANTES AND SUBSEQUENTLY TRANSDUCES A SIGNAL BY INCREASING THE INTRACELLULAR CALCIUM IONS LEVEL. MAY PLAY A ROLE IN THE CONTROL OF GRANULOCYTIC LINEAGE PROLIEBRATION OR DIFFERENTIATION. ACTS AS CO-RECEPTOR WITH CD4 FOR PRIMARY NON-SYNCYTUM-INDUCING STRAINS (NSI) (MACROPHAGE-TROPIC) OF HIV-1 VIRUS. IT PROMOTES ENV-MEDIATED FUSION OF THE VIRUS.
                                                                                                                                                                               SUBCELULAR LOCATION: Integral membrane protein.
TISSUE SPECIFICITY: FOUND IN PROMYELOCYTIC CELLS.
FTM: SULFATION CONTRIBUTES TO THE EFFICIENCY OF H
FTM: MODIFIED BY O-LINKED GLYCOSYLATION, BUT NOT
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o P., Marmon S., Sutton R.E., H
.C., Schall T.J., Littman D.R.,
                                                                                                   non-profit institutions as long
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 AAC50598.1;
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                                                                                                                                                           BELONGS TO FAMILY 1 OF G-PROTEIN COUPLED RECEPTORS.
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Hill C.M., Davis C.B.,
Landau N.R.;
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PRO0237; G_PROTEIN_RECEP_F1_1;

PROPERIN_RECEP_F1_2;

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15-JUL-1998 (Rel. 36, L
16-OCT-2001 (Rel. 40, L
                                  "Sequence
HIV type 1
                                                                                                                                                             MEDLINE-97268687; PubMed-9108095;
Edinger A.L., Amedee A., Miller K., Doranz B.J., End
Sharron M., Samson M., Lu Z.H., Clements J.E., Murph
Pelper S.C., Parmentier M., Broder C.C., Doms R.W.;
"Differential utilization of CCR5 by macrophage and
simian immunodeficiency virus strains.";
Proc. Natl. Acad. Sci. U.S.A. 94:4005-4010(1997).
                          AIDS
                                                                              AIDS
                                                                                      Zhang
Ho D.D
                                                                                                                                                                                                            SEQUENCE FROM N.A. MEDLINE-97268687;
                                                                                                                                                                                                                                         Pan troglodytes (Chimpanzee).
Eukaryota; Motazoa; Chordata;
Mammalla; Eutheria; Primates;
   SEQUENCE FROM N.A. MEDLINE-98090115;
                                              MEDLINE-97426118;
Zacharova V., Zaci
                                                              SEQUENCE
                                                                                                           SEQUENCE FROM N.A. MEDLINE-98022612;
                                                                                                                                        SEQUENCE FROM N.A. Zimmerman P.A., Bu
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                                of chemokine
1 host.";
                                                                                                                                P.A., Buckler-White A., Alkhatib G.; (MAR-1997) to the EMBL/GenBank/DDBJ
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                                              PubMed-9282822;
har V., Goustin A.S.;
                                                                                                  PubMed=9359654;
ers C.D., He T.,
    PubMed-9430250;
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                                                                             coreceptor usage, and CC 
1ruses 13:1357-1366(1997)
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x type 5 (C-C CKR-5) (CC-CKR-5)
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HEPYSQYQFWKNEQTLKIVILGLVLPLLVMVICYSGILKTLLRCRNEKKRHRAVRLIFTI
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"Chimpanzee CXCR4 and CCR5 act as coreceptors for HIV type
AIDS Res. Hum. Retroviruses 13:1583-1587(1997).

-I- FUNCTION: RECEPTOR FOR A C-C TYPE CHEMOKINE. BINDS TO MIP-1-BETA AND RANTES AND SUBSEQUENTLY TRANSDUCES A SIG
INCREASING THE INTROELULULAR CALCIUM IONS LEVEL. MAY PL
IN THE CONTROL OF GRANULOCYTIC LINEAGE PROLIFERATION OR
                                                                                                                   Pfam; PF00001; 7tm_1; 1.
PRINTS; PR00237; GPCRHODDPSN.
PROSITE: PS00237; G_PROTEIN_RE
PROSITE; PS50262; G_PROTEIN_RE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SWISS-PROT entry is copyright. It is produced through ween the Swiss Institute of Bioinformatics and the Electropean Bioinformatics Institute. There are no resti
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SUBCELLULAR LOCATION: Integral membrane protein.
SIMILARITY: BELONGS TO FAMILY 1 OF G-PROTEIN COUPLED RECEPTORS.
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                                                                                                                 G_PROTEIN_RECEP_F1_1; 1.
G_PROTEIN_RECEP_F1_2; 1.
                                                                                               receptor;
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2 (POTENTIAL)
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                                                                    ransmembrane; Glycoprotein; EXTRACELLULAR (POTENTIAL).
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InterPro; IPR000276; GPCR_Rhodpsn.
Pfam; PF00001; 7tm_1; 1.
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-i- FUNCTION: RECEPTOR FOR A C-C TYPE CHEMOKINE.
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the European Bioinformatics Institute. The use by non-profit institutions as long modified and this statement is not removed entitles requires a license agreement (See or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                     "Differential utilization of Granulocytic Lineage Proliferation or "Differential utilization";

"Differential utilization" of Granulocytic Strains.";

"Proc. Natl. Acad. Sci. U.S.A. 94:4005-4010(1997).

"IP FUNCTION: RECEPTOR FOR A C-C TYPE CHEMOKINE. BINDS TO MIP-1-ALPHA, MIP-1-BETA AND RANTES AND SUBSEQUENTLY TRANSDUCES A SIGNAL BY INCREASING THE INTRACELLULAR CALCIUM IONS LEVEL, MAY PLAY A ROLE TO THE CONTROL OF GRANULOCYTIC LINEAGE PROLIFERATION OR
                                                                                                                                                                                                                                                                                                                                                                        Eddinger A.L., Amedee A., Miller K., Doranz B.J., Endres M., Sharron M., Samson M., Lu Z.H., Clements J.E., Murphey Corb Peiper S.C., Parmentler M., Broder C.C., Doms R.W., "Differential utilization of CCR5 by macrophage and T cell t
                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQUENCE FROM N.A. MEDLINE=97268687; PubMed=9108095;
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 SEQUENCE FROM N.A.
MEDLINE-99416438; PubMed-10486970;
Zhang Y.-W., Ryder O.A., Zhang Y.-
"Sequence evolution of the CCR5 ch
                                                                                   Eukaryota; Metazoa;
Mammalia; Eutheria;
Trachypithecus.
                                                                                              Trachypithecus phayrei (Phayre's leaf monkey).
Eukaryota; Metazoa; Chordata; Craniata; Verteb
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22: G_PROTEIN_RECEP_F1_2; 1.
23: G_PROTEIN_RECEP_F1_2; 1.
24: G_PROTEIN_RECEP_F1_2; 1.
25: G_PROTEIN_RECEP_F1_2; 1.
26: GEXTRACELLULAR (POTENTIAL).
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Pred. No. 6.8e-91;
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MOI. BIOI. EVOI. 16:1145-1154(1999).

-I- FUNCTION: RECEPTOR FOR A C-C TYPE CHEMOKINE. BINDS TO MIP-1-ALPHA, MIP-1-BETA AND RANTES AND SUBSEQUENTLY TRANSDUCES A SIGNAL BY INCREASING THE INTRACELLULAR CALCIUM IONS LEVEL. MAY PLAY A ROLE IN THE CONTROL OF GRANULOCYTIC LINEAGE PROLIFERATION OR
                                                                                                                                                                                                                                                                                                                                                                                                                                                           veen the Swiss Institute of Bioinro
European Bioinformatics Institute.
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SUBCELLULAR LOCATION: Integral membrane protein.
SIMILARITY: BELONGS TO FAMILY 1 OF G-PROTEIN COU
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CKR5_P/
                                                  Edinger A.L., Amedee A., Miller K., Doranz B.J., Endres M., Sharron M., Samson M., Lu Z.H., Clements J.E., Murphey-Corb Peiper S.C., Parmentier M., Broder C.C., Doms R.W.; "Differential utilization of CCR5 by macrophage and T cell simian immunodeficiency virus strains."; Proc. Natl. Acad. Sci. U.S.A. 94:4005-4010(1997).
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                  use by non-profit institutions as long modified and this statement is not removed. entities requires a license agreement (See
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MEDLINE-99210133; PubMed-10195758;
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"Species-specific changes
nonhuman primates.";
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Mammalia; Eutheria; Primates;
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16-OCT-2001 (Rel. 40, Last annotation
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SIMILARITY: BELONGS TO FAMILY 1 OF G-PROTEIN COUPLED RECEPTORS.
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een the Swiss Institute of Bio
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                                                                                                                                                                                                         352;
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                                                                                                                                           120
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CKR5_TRAFR
ID CR5_T
AC 0997878
AC 0997878
DT 30-MAY
DT 15-JUN
DT 15-CC Ch
GN CCR5 O
CCR5 O
COMMAND
CC TRACHY
OC MAMMA
CC TRACHY
OC MAMMA
CC IN
CC -!- FU
CC -!- SU
CC -!- SU
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                                                                                                                                                                                                                                                                                                                                                                                                       Trachypithecus.
NCBI_TaxID=54180;
[1]
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097878;
30-MAY-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CCR5 OR CMKBR5.
Trachypithecus francoisi (Francois' langur) (Indochinese langur).
Finkarvota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
                                                                SEQUENCE FROM N.A.

MEDLINE-99416438; PubMed-10486970;

Zhang Y.-W., Ryder O.A., Zhang Y.-P.;

Zhang Y.-P.;

Zhang Y.-P.;

Zhang Y.-P.;

Zhang Y.-P.;

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15-JUN-2002

    C chemokine

   SUBCELLULAR LOCATION: Integral
                                         DIFFERENTIATION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Eutheria;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (Rel. 39, Created)
(Rel. 39, Last sequence update)
(Rel. 41, Last annotation update)
ne_receptor type 5 (C-C CKR-5) (CC-CKR-5)
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                                                                            PROLIFERATION
   protein
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OR
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RESULT 8
CKR5_PYGBI
ID CKR5_P
AC 097880
DT 30-MAY
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Best Local
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Pfam; PF000237; GPCRRHODOPSN.
PRINTS; PR00237; GPCOTEIN_RECEP_F1_1; 1.
PROSITE; PS50262; G_PROTEIN_RECEP_F1_2; 1.
PROSITE; PS50262; G_PROTEIN_RECEP_F1_2; 1.
G-protein coupled receptor; Transmembrane; Glycoprotein;
G-protein coupled receptor; Transmembrane; Glycoprotein;
G-protein coupled 30

EXTRACELLULAR (POTENTIAL).
  CKR5_PYGBI
097880;
30-MAY-2000
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MOD_RES
SEQUENCE
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TRANSMEM
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              EMBL; AF075442; AAD19854.1; -.
InterPro; IPR000276; GPCR_Rhodpsn.
Pfam; PF00001; 7tm_1; 1.
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een the Swiss Institute of Bioinformatics and the EMBL outstation -
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                                                                                                 LLTIDRYLAIVHAVFALKARTVTFGVVTSVITWVVAVFASLPGIIFTRSQREGLHYTCSS
  (Rel. 39, Created)
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                               STANDARD;
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CYTOPLASMIC (POTENTIAL).

BY SIMILARITY.

BY SULFATION (BY SIMILARITY).

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CYTOPLASMIC (POTENTIAL).
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Pred. No. 2.
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6 (POTENTIAL
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3 (POTENTIAL).
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7 (POTENTIAL).
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                               PRT;
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                               352
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LLTIDRYLAVVHAVFALKARTVTFGVVTSVITWVVAVFASLPGIIFTRSQKEGLHYTCSS
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103
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SEQUENCE FROM N.A.

MEDILINE-99416438; PubMed-10486970;
Zhang Y.-W., Ryder O.A., Zhang Y.-P.;
"Sequence evolution of the CCR5 chemokine receptor
MO1. Biol. Evol. 16:1145-1144(199).
-I- FUNCTION: RECEPTOR FOR A --- murr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   This SWISS-PROT entry is copyright. It is produced through a collab between the Swiss Institute of Bioinformatics and the EMBL outst the European Bioinformatics Institute. There are no restrictions use by non-profit institutions as long as its content is in
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   30-MAY-2000 (Rel. 39, Last sequence update)
15-JUN-2002 (Rel. 41, Last annotation update)
C-C chemokine receptor type 5 (C-C CKR-5) (CC-CKR-5)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PROSITE: PS00237, G_PROTEIN_RECEP_F1_1; 1.

PROSITE: PS50262; G_PROTEIN_RECEP_F1_2; 1.

PROSITE: PS50262; G_PROTEIN_RECEP_F1_2; 1.

G-protein coupled receptor; Transmembrane; Glycoprotein; GMAIN

BXTRACELLULAR (POTENTIAL).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     entities requires a license agreement (S or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Pygathrix bleti (Black snub-nosed monkey) (Rhinopithecus bieti).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Cercopithecidae; Colobi
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                EMBL; AF075445; AAD19857.1; InterPro; IPR000276; GPCR_RI Pfam; PF00001; 7tm_1; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      modified and this statement
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SUBCELLULAR LOCATION: Integral membrane protein.
SIMILARITY: BELONGS TO FAMILY 1 OF G-PROTEIN COUPLED RECEPTORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FUNCTION: RECEPTOR FOR A C-C TYPE CHEMOKINE. BINDS TO MIP-1-ALPHA, MIP-1-BETA AND RANTES AND SUBSEQUENTLY TRANSDUCES A SIGNAL BY INCREASING THE INTRACELLULAR CALCIUM IONS LEVEL. MAY PLAY A ROLE IN THE CONTROL OF GRANULOCYTIC LINEAGE PROLIFERATION OR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DIFFERENTIATION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              F00001; 7tm_1; 1.
PR00237; GPCRRHODOPSN.
                                                                                                                                                             Similarity
                    LKSMTDIYLLNLAISDLEFLLTVPFWAHYAAAQWDFGNTMCQLLTGLYFIGFFSGIFFII
                                                                    14
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                                                                                                                                            Conservative
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CYTOPLASMIC (PERMICARITY).
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SULFATION (BY
SULFATION (BY
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5; Mismatches
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EXTRACELLULAR
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5 (POTENTIAL).
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42730F938F CRC64;
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30-MAY-2000 (Rel.
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InterPro; IPR000276; GPCR_Rhodpsn.
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Zhang Y.-W., Ryder O.A., Zhang Y.-P.;
Zhang Y.-W., Ryder O.A., Zhang Y.-P.;
"Sequence evolution of the CCR5 chemokine receptor gene in primates."
MOI. BIOI. EVOI. 16:1145-1154(1999).

-i- FUNCTION: RECEPTOR FOR A C-C TYPE CHEMOKINE. BINDS TO MIP-1-ALPHI
MIP-1-BETA AND RANTES AND SUBSEQUENTLY TRANSDUCES A SIGNAL BY
INCREASING THE INTRACELULAR CALCIUM IONS LEVEL, MAY PLAY A ROLE
IN THE CONTROL OF GRANULOCYTIC LINEAGE PROLIFERATION OR
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Mammalia; Eutheria;
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Zhang Y.-W., Ryder O.A., Zhang Y.-P.,
Zhang Y.-W., Ryder O.A., Zhang Y.-P.,
"Sequence evolution of the CCR5 chemokine receptor gene in primates.",
Mol. Biol. Evol. 16:1145-1154 (1999).

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MIP-1-BETA AND RANTES AND SUBSEQUENTLY TRANSDUCES A SIGNAL BY
INCREASING THE INTRACELLULAR CALCIUM IONS LEVEL, MAY PLAY A ROLE
TO THE CONTROL OF GRANULOCYTIC LINEAGE PROLIFERATION OR
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MOD_RES
MOD_RES
MOD_RES
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DOMAIN
                                                  CCR5 OR CMKBR5.

Macaca mulatta (Rhesus macaque),

Macaca fascicularis (Crab eating

Macaca nemestrina (Pig-tailed ma
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TRANSMEM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          G-protein
                                                                                                                                                    MACMU
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SEQUENCE
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PF00001; 7tm_1: 1
                                                                                                                                                                                          301
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                                                                                                                                                                                                                                                                                                                                                                                                                                      Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PS00237; G_PROTEIN_RECEP_F1_1; 1.
PS50262; G_PROTEIN_RECEP_F1_2; 1.
PS50262; G_PROTEIN_RECEP_F1_2; 1.
Coupled receptor; Transmembrane; Glycoprotein; Sulfation.
1 30
EXTRACELLULAR (POTENTIAL).
                                                                                                                                                                                       142
199
219
236
236
278
302
101
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103
125
                                                                                          receptor
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                                                                                                                                         STANDARD;
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                                                                                                                                                                                                                                                                                                                                                                                                                                      98.5%;
                                                                                        Last sequence update)
Last annotation update)
r type 5 (C-C CKR-5) (CC-CKR-5)
                                                                                                                      Created)
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                                                            eating
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1 (POTENTIAL).

2 (POTENTIAL).

2 (POTENTIAL).

2 (POTENTIAL).

2 (POTENTIAL).

3 (POTENTIAL).

CYTOPLASMIC (POTENTIAL).

4 (POTENTIAL).

5 (POTENTIAL).

5 (POTENTIAL).

6 (POTENTIAL).

6 (POTENTIAL).

CYTOPLASMIC (POTENTIAL).

7 (POTENTIAL).

EXTRACELLULAR (POTENTIAL).

CYTOPLASMIC (POTENTIAL).

EXTRACELLULAR (POTENTIAL).

CYTOPLASMIC (POTENTIAL).

SULFATION (BY SIMILARITY).

SULFATION (BY SIMILARITY).

SULFATION (BY SIMILARITY).
                                                                                                                                                                                                                                                                                                                                                                                                                                      Score 1814; DB 1;
Pred. No. 2.6e-90;
                               macaque).
Craniata; Vertebrata;
Catarrhini; Cercopithe
                                                                                                                                           PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   4F8E4F344CEB7C91 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                              Mismatches
                                                            macaque)
                                                                                                                                           352
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                                                             (Cynomolgus monkey),
                                Cercopithecidae;
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                                                                                                                                                                                                                                                                                                                                                                                                                              Indels
                                           Euteleostomi;
                                                                                         (CCR-5)
                                                                                                                                                                                                                                                                                                                                                                                                                                                 352;
                                                                                          (CCR5).
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     EMBL; U77672; AAC51109.1; -.
EMBL; U73739; AAC31158.1; -.
EMBL; U73739; AAC34132.1; -.
EMBL; AF005660; AAB62554.1; -.
EMBL; AF005661; AAB62555.1; -.
EMBL; AF005662; AAB62555.1; -.
EMBL; AF005662; AAB62555.1; -.
EMBL; AF005662; AAB62556.1; -.
EMBL; AF005662; AAB62556.1; -.
EMBL; AF005662; AAB62556.1; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SEQUENCE FILE.

SPECIES-M.mulatta;

MEDLINE-2134176; PubMed-11461684;

MEDLINE-2134176; PubMed-11461684;

Marguiles B.J., Hauer D.A., Clements J.E.;

Marguiles B.J., Hauer D.A., Clements T.E.;

                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SEQUENCE FROM N.A.

SPECIES-M.mulatta;

MEDLINE-97184592; PubMed-9032394;

Marcon L., Choe H., Martin K.A., Farzan M.,

Newman W., Gerard N., Gerard C., Sodroski J.

"Utilization of C-C chemokine receptor 5 by

91ycoproteins of a pathogenic simian immunod
   TRANSMEM
DOMAIN
TRANSMEM
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                                                                      TRANSMEM DOMAIN
                                                                                                            PROSITE;
                                                                                                                                                                                                                            This SWISS-PROT entry is copyright. It is produced through a collab between the Swiss Institute of Bioinformatics and the EMBL outst the European Bioinformatics Institute. There are no restrictions use by non-profit institutions as long as its content is in modified and this statement is not removed. Usage by and for comentities requires a license agreement (See http://www.isb-sib.ch/an or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                    SPECIES-M.mulatta; STRAIN-Indian macaque;
MEDLINE-97213934; PubMed-9060623;
Chen Z., Zhou P., Ho D.D., Landau N.R., Marx P.A.;
"Genetically divergent strains of simian immunodeficiency virus
CCR5 as a coreceptor for entry.";
J. Virol. 71:2705-2714(1997).
                                                                                                                                                                                                                                                                                                                                                                                                                                     SPECIES-M.mulatta, M.fascicularis, and M.nemestrina; MEDLINE-97268687; PubMed-9108095;
                                                                                           DOMAIN
                                                                                                   G-protein
                                                                                                                                 PRINTS;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       J. Virol.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SIVmac239
                                                                                                                                                                                                                                                                                        DIFFERENTIATION: Integral membrane protein.
SUBCELLULAR LOCATION: Integral membrane protein.
SUMILARITY: BELONGS TO FAMILY 1 OF G-PROTEIN COUPLED
SIMILARITY: BELONGS TO FAMILY 1 OF G-PROTEIN COUPLED
                                                                                                         PR00237; GPCRRHODOPSN.
PS00237; GPROTEIN_RECEP_F1_1; 1.
PS50262; GPROTEIN_RECEP_F1_2; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      71:2522-2527(1997).
                                                                                                  coupled
    31
69
90
103
125
142
167
                                                                                                    receptor;
    58
68
68
102
124
141
141
198
                                                                                         Transmembrane;
EXTRACELLULAR
   1 (POTENTIAL).
CYTOPLASMIC (PC
2 (POTENTIAL).
EXTRACELLULAR (
3 (POTENTIAL).
CYTOPLASMIC (PC
4 (POTENTIAL).
EXTRACELLULAR (
5 (POTENTIAL).
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                                                                                        Glycoprotein;
(POTENTIAL).
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Murphey-Corb
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RECEPTORS

A collaboration MBL outstation -

outstation

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Sulfation.

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cnen Z., Gettie A., Ho D.D., Marx P.A.;

rprimary SIVsm isolates use the CCR5 coreceptor from soon naturally infected in west Africa: a comparison of corece of primary SIVsm, HIV-2, and SIVmac.";

L Virology 246:113-124(1998).

T. VIROLOGION: RECEPTOR FOR A C-C TYPE CHEMOKINE. BINDS TO MID-1-BETA AND RANTES AND SUBSEQUENTLY TRANSDUCES A SIL INCREASING THE INTRACELLULAR CALCIUM IONS LEVEL. MAY TO DIFFERENTIATION.

IN THE CONTROL OF GRANULOCYTIC LINEAGE PROTECTION.

SUBCELLULAR LOCATION.
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Matches 344
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CONFLICT
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SEQUENCE
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TRANSMEM
DOMAIN
                                                                                                                                                                                                                  CKR5_CERTO STANDARD; PRT; 352 AA.

062744; 062744; 062745; 062746;

15-DEC-1998 (Rel. 37, Created)

16-DEC-1998 (Rel. 37, Last sequence update)

16-OCT-2001 (Rel. 40, Last annotation update)

C-C Chemokine receptor type 5 (C-C CKR-5) (CC-CKR-5)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DOMAIN
DISULFID
                                                                                                                                                                              Cercocebus torquatus atys (Red-crowned mangabey) (Sooty mangabey). Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Cercopithecidae;
                                                                                                                                                                                                                                                                                 _CERTO
                                                                                                                                                                       Cercopithecinae; Cercocebus.
                                                                                                                                                                                                               CCR5 OR CMKBR5.
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                                                                                                                                                                                                                                                                                                                                                                   MIVYFLFWAPYNIVLLLNTFQEEFGLNNCSSSNRLDQAMQVTETLGMTHCCINPIIYAFV
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                                                                                                                                                                                                                                                                                                                                                                                                 HFPYSQYQFWKNFQTLKMVILGLVLPLLVMVICYSGILKTLLRCRNEKKRHRAVRLIFTI
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M-> I (IN REF.
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6 (POTENTIAL).
EXTRACELLULAR (POTENTIAL)
7 (POTENTIAL).
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FOR (BLCNAC. . .) (POT)
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S M (IN REF. 3).
                                  LINEAGE PROLIFERATION
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                                                                                          from sooty mangabeys of coreceptor usage
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                                            MAY
                                                                                                                                                                                                                       (CCR-5)
                                                     TO MIP-1-ALPHA,
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                 MIVYFLFWAPYNIVLLLNTFQEFFGLNNCSSSNRLDQAMQVTETLGMTHCCINPIIYAFV
                           MTVYFLFWAPYNTVLLLUTFQEFFGLNNCSSSNRLDQAMQVTETLGMTHCCINPIIYAFV
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EMBL; AF051902; AAC39830.1; -. EMBL; AF051903; AAC39831.1; -. EMBL; AF051904; AAC39832.1; -. EMBL; AF051905; AAC39833.1; -. InterPro; IPR000276; GPCR_Rhodpsn. Pfam; PF00001; 7tm_1; 1.
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PROSITE; PS00237; G_PROTEIN_RE
PROSITE; PS50262; G_PROTEIN_RE
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European Bioinformatics Institute
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                                                                                                                                                                                                                                                                                                                                                Similarity
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nilarity 97.48;
Conservative
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G_PROTEIN_RECEP_F1_2; 1.
receptor; Transmembrane;
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Pred.
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CYTOPLASMIC (PC
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OL
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Submitted (JUL-1998) to the EMBL/GenBank/DDBJ databases.

-I- FUNCTION: RECEPTOR FOR A C-C TYPE CHEMOKINE. BINDS TO MIP-1-ALPHA,

-II- FUNCTION: RECEPTOR FOR A C-C TYPE CHEMOKINE. BINDS TO MIP-1-BETA AND RANTES AND SUBSEQUENTLY TRANSDUCES A SIGNAL BY

INCREASING THE INTRACELLULAR CALCIUM IONS LEVEL. MAY PLAY A ROLE

INCREASING THE INTRACELLULAR CALCIUM IONS LEVEL. MAY PLAY A ROLE
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PROSITE;
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                                                                                                                                                                                             EMBL; U83324; AAC51795.1; -. EMBL; U83325; AAC51796.1; -. EMBL; AB015944; BAA31328.1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                               MEDLINE-98001387; PubMed-9343222;
Kuhmann S.E., Platt E.J., Kozak S.L., Kabat D.;
"Polymorphisms in the CCR5 genes of African green monke
implicate specific amino acids in infections by simian
immunodeficiency viruses.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Cercopithecinae;
NCBI_TaxID-9534;
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Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Eutele
Mammalia; Eutheria; Primates; Catarrhini; Cercopithecidae;
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Pfam; PF00001; 7tm_1; 1.
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Murayama Y., Matsu
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                                                                                                                                                                                                                                                                                                                  SUBCELLULAR LOCATION: Integral membrane protein.
SIMILARITY: BELONGS TO FAMILY 1 OF G-PROTEIN COUPLED RECEPTORS
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G_PROTEIN_RECEP_F1_2;
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N_RECEP_F1_2; 1.
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green monkey CCR-5
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STRAIN-C57BL/6 x CBA;
MEDLINE-96278910; Pubm
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[1]
SEQUENCE FROM N.A.
STRAIN=129/SvJ; TISSUE=Spleen;
MEDLINE=96205938; PubMed=8631787;
MEDLINE=963011ng J., Monteclaro
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P51682; 061867; P97405; 035313; P77500, 201-0CT-1996 (Rel. 34, Created)
15-JUL-1998 (Rel. 36, Last sequence update)
16-OCT-2001 (Rel. 40, Last annotation update)
16-OCT-2001 (Rel. 40, Last annotation update)
MEDILINE-96278910; PubMed-8662890;
Meyer A., Coyle A.J., Proudfoot A.E.I., V
"Cloning and characterization of a novel
inflammatory protein-1 alpha receptor.";
J. Biol. Chem. 271:14445-14451(1996).
                                                                                                                                                                     "MOLECULAR cloning and functional expression of murine JE (monocyte chemoattractant protein 1) and murine macrophage inflammatory protein lalpha receptors: evidence for two closely linked C-C chemokine receptors on chromosome 9.";
J. Biol. Chem. 271:7551-7558(1996).
                                                                                                                                                                                                                                                                                                                                                                                                                                                               Mus musculus (Mouse).
Eukaryota; Metazoa; Chordata;
Mammalia; Eutheria; Rodentia;
                                                                                                                TISSUE-Thymus;
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Sciurognathi; Muridae;
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[3]
SEQUENCE FROM N.
STRAIN-129/Ola;
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Submitted (JAN-1997) to the EMBL/GenBank/DDBJ databases.

1- FUNCTION: RECEPTOR FOR A C-C TYPE CHEMOKINE. BINDS TO MIP-1-ALF

MIP-1-BETA AND RANTES AND SUBSEQUENTLY TRANSDUCES A SIGNAL BY

INCREASING THE INTRACELLULAR CALCIUM IONS LEVEL.

1- SUBCELLULAR LOCATION: Integral membrane protein.

1- TISSUE SPECIFICITY: DETECTED IN MONOCYTE/MACROPHAGE CELL LINES.

BUT NOT IN NONHEMATOPOLETIC CELL LINES.

1- SIMILARITY: BELONGS TO FAMILY 1 OF G-PROTEIN COUPLED RECEPTORS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       immunodeficiency virus type 1.";
J. virol. 71:6305-6314(1997).
[6]
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MEDLINE=98001387; PubMed=9343222;
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implicate specific amino acids
immunodeficiency viruses.";
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PROSITE; PS00237; G_PROTEIN_RECEP_F1_1;
PROSITE; PS50262; G_PROTEIN_RECEP_F1_2;
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Dang B.J., Lu Z.H., Rucker J., Zhang T.Y., Sharron M., Z.X., Guo H.H., Du J.G., Accavitti M.A., Doms R.W., distinct CCR5 domains can mediate coreceptor usage 1
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en the Swiss Institute of Bioinformatics and the Eb
European Bioinformatics Institute. There are no restr
by non-profit institutions as long as its content
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  Dawson T.C., Maeda N., the EMBL/GenBank/DDBJ
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Spleiss O., Gourmala N., Boddeke
Splers M., Gebicke-Haerter P.J.;
Berger M., Gebicke-Haerter P.J.;
"Cloning of rat HIV-1-chemokine of
SEQUENCE
                                                          STRAIN-Wistar;
                                                                 SEQUENCE FROM N.A.
                                                                              NCBI_TaxID=10116;
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Mammalia; Eutheria;
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              of rat HIV-1-chemokine coreceptor tion of its mRNA in ischemic and ersci. Res. 53:16-28(1998).
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PROSITE: PS00237; G_PROTEIN_RECEP_F1_1;

PROSITE: PS50262; G_PROTEIN_RECEP_F1_2;
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EMBL; U77350; AAC03243.1; -.
IntorPro; IPR000276; GPCR_Rhodpsn.
Pfam; PF00001; 7tm_1; 1.
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J. Neuroimmunol. 86:1-12(1998).
-I- FUNCTION: RECEPTOR FOR A C-C TYPE CHEMOKINE. BINDS TO MIP-1-ALPH
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Zhang Y., Ryder O.A., Zhang Y.;
Zhang Y., Ryder O.A., Zhang Y.;
"Sequence comparison of the CCR5 gene in primates and property of the CCR5 gene in primates and property of the EMBL/GenBank/DDBJ databases.

EMBL; AF177884; AR43367.1;
InterPro; IPR000276; GPCR_Rhodpsn.
PIam; PF00001; 7tm_1; 1.

PROSITE; PS00237; G_PROTEIN_RECEP_F1_1; UNKNOWN_1.

PROSITE; PS50262; G_PROTEIN_RECEP_F1_2; 1.
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SEQUENCE
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Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hylobatidae; Hylobates.
NCBI_TaxID=9590; '
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Pred. No. 9.5e-147;
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PRINTS; PR00237; GPCRRHODOPSN.

PROSITE; PS00237; G_PROTEIN_RECEP_F1_1; PROSITE; PS50262; G_PROTEIN_RECEP_F1_2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            "HIV-1 subtypes, co-receptor usage, and AIDS Res. Hum. Retroviruses 0:0-0(1997). EMBL; AF011539; AAB65739.1; -.
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STRAIN-CHCCR5-141A;
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Mammalia; Eutheria;
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Eukaryota; Metazoa; Chordata;
Mammalia; Eutheria; Primates;
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R Pfam; pr00001; Ttm_1; 1.

R Pfam; pr00001; Ttm_1; 1.

PRINTS; PR00237; GPCRRHODOPSN.
PROSITE; PS00237; G_PROTETN

PROSITE; PS00237; G_PROTETN
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CC chemokine
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Eukaryota; Metazoa; Chordata;
Mammalia; Eutheria; Primates;
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Mammalia; Eutheria;
NCBI_TaxID=9598;
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Gorilla gorilla (gorilla).
Eukaryota; Metazoa; Chordata;
                             chemokine
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352 AA;
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G_PROTEIN_RECEP_F1_2;
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40598 MW;
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Pred. No. 1.4e-146;
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Catarrhini; Hominidae;
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Best Local :
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WEDLINE-99210133; PubMed-10195758;
WEDLINE-99210133; PubMed-10195758;
SakBena N.K., Wang B., Novembre F.J., Bolton W.,
Species specific changes in the CCR5 gene from
nonhuman primates *;
AIDS Res. Hum. Retroviruses 15:479-483(1999).
EMBL; AF105291; AAD20560.1; -.
INTERPROPER STREET S
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O9TV50;
O9TV50;
O1-MAY-2000 (TrEMBLrel. 13, C
O1-MAY-2000 (TrEMBLrel. 13, L
O1-JUN-2001 (TrEMBLrel. 17, L
CC chemokine receptor type 5.
CCR5.
                                                      MEDILINE-99335215; PubMcd-10408730; Muller-Trutwin M.C., Corbet S., Hansen J., Georges-Cour Diop O., Rigoulet J., Barre-Sinousal F., Fomsgaard A.; "Mutations in CCR5-coding sequences are not associated carrior status in African nonhuman primates."; AIDS Res. Hum. Retroviruses 15:931-939(1999).
                                                                                                                                                                                                                                                     Pan troglodytes (Chimpanzee).
Eukaryota; Metazoa; Chordata;
Mammalla; Eutherla; Primates;
  SEQUENCE FROM STRAIN-1410;
                                                                                                                                                                          STRAIN-1410;
                                                                                                                                                                                           SEQUENCE FROM N.A.
                                                                                                                                                                                                                   NCBI_TaxID=9598;
[1]
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NCBI_TaxID-9593;
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Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                            Created)
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                                                                                                                                                                                                                                                        Craniata; Vertebrata;
Catarrhini; Hominidae
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Catarrhini;
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                                                                                                                 Fomsgaard A.;
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Best Local S
Matches 346
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Georges-Courbot M.-C., Barre-Sinoussi F., Fons
Submitted (NOV-1997) to the EMBL/GenBank/DDBJ
EMBL; AF035214; AAD44007.1; -
InterPro; IPR000276; GPCR_Rhodpsn.
                                                                                                                                                                                                                                                                                                   pfam: pF00001; 7tm_1; 1.

PRINTS; PR00237; GPCRRHODOPSN.

PROSITE; PS00237; G_PROTEIN_RECEP_F1_1;

PROSITE; PS50262; G_PROTEIN_RECEP_F1_2;
                                                                                                                                                                                                                                                                                   Receptor.
SEQUENCE
 301
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346; Conserv
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                                     LKSMTDIYLLNLAISDLFFLLTVPFWAHYAAAQWDFGNTMCQLLTGLYFIGFFSGIFFII
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GEKFRNYLLVFFQKHIAKRFCKCCSIFQQEAPERASSVYTRSTGEQEISVGL
          GEKFRNYLLVFFQKHIAKRFCKCCSIFQQEAPERASSVYTRSTGEQEISVGL 352
                                                                                                                                                           LKSMTDIYLLNLAISDLFFLLTVPFWAHYAAAQWDFGNTMCQLLTGLYFIGFFSGIFFII
                                                                                                                                                                                                   MDYQVSSPTYDIDYYTSEPCQKINVKQIAARLLPPLYSLVFIFGFVGNILVVLILINCKR
                                                                                                                                                                                                                                                                                   352 AA;
                                                                                                                                                                                                                                            Conservative
                                                                                                                                                                                                                                                                                   40481 MW;
                                                                                                                                                                                                                                                     98.98;
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                                                                                                                                                                                                                                          Score 1821; Di
Pred. No. 2.1e
5; Mismatches
                                                                                                                                                                                                                                                                                 2578A0F2C07A4A65 CRC64;
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                                                                                                                                                                                                                                                                                                     UNKNOWN_1.
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DBJ databases
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RESULT 6
                                Query Match
Best Local S
Matches 347
                                                                                                                            SEQUENCE FROM N.A.

Zhang Y., Ryder O.A., Zhang Y.;
Zhang Y., Ryder O.A., Zhang Y.;
Sequence comparison of the CCR5 gene in primate;
phylogeny.";
Submitted (AUG-1999) to the EMBL/GenBank/DDBJ da
REMEL; AP177899; AAR43382.1; -
RINTEFPO; IPRO00276; GPCR_Rhodpsn.
R Pfam; PP00001; 7tm_1; 1.
R PROSITE; PS00237; G_PROTEIN_RECEP_F1_1; UNKNOWN_R PROSITE; PS00237; G_PROTEIN_RECEP_F1_2; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                               Q95NCO;
Q95NCO;
01-DEC-2001
                                                                                                   PROSITE; |
PROSITE; |
Receptor.
SEQUENCE
                                                                                                                                                                                                                                                                                                                                        Hylobates moloch (silvery gibbon).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Eu
Mammalia; Eutheria; Primates; Catarrhini; Hylobatidae;
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                                                                                                                                                                                                                                                                                                                         NCBI_TaxID-81572;
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                                   347;
                                                   Similarity
MDYQVSSPIYDINYYTSEPCQKINVKQIAARLLPPLYSLVFIFGFVGNMLVILILINCKR
                                                                                                   352 AA;
                                   Conservative
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                                                                                                                                  G_PROTEIN_RECEP_F1_1; UNKNOWN_1.
G_PROTEIN_RECEP_F1_2; 1.
                                                                                                   40436 MW;
                                              98.8%;
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                              Score 1818; DI
Pred. No. 3.7e
2; Mismatches
                                 <u>ب</u>
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                                                                                                  9623CA98340CF274 CRC64;
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                                                                   DB 6;
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Q95NC7;
Q1-DEC-2001
Q1-DEC-2001
Q1-MAR-2002
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InterPro; IPR000276; GPCR_Rhodpsn.
Pfam; PF00001; 7tm_1; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                            "Sequence comparison phylogeny.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SEQUENCE FROM N.A. Zhang Y., Ryder O.A.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Nasalis larvatus (Proboscis monkey).
Eukaryota; Metazoa; Chordata; Craniata; V
Mammalia; Eutheria; Primates; Catarrhini;
                                                                                                                                                                                                                                                                                                                                                                  PROSITE; PS00237; G_PROTEIN_RECEP_F1_1; PROSITE; PS50262; G_PROTEIN_RECEP_F1_2;
                                                                                                                                                                                                                                                                                                                                         SEQUENCE
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          MIVYFLFWAPYNIVLLLNTFQEFFGLNNCSSSNRLDQAMQVTETLGMTHCCINPIIYAFV
                                       MDYQVSSPTYDIDYYTSEPCQKVNVKQIAARLLPPLYSLVFIFGFVGNILVVLILINCKR
                                                                                                                                                                                                                                    MDYQVSSPIYDINYYTSEPCQKINVKQIAARLLPPLYSLVFIFGFVGNMLVILILINCKR
                                                                                                                                                                                                                                                                                                                                        352 AA; 40537 MW;
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(TrembLrel. 19, Last seq:
(TrembLrel. 20, Last annote receptor 5.
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97.7%;
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Pred. No. 4.5e-146;
7; Mismatches 1;
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ecidae; Colobinae;
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C-C chemokine receptor type 5.
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"Sequence comparison of the CCR5 gene in phylogeny.";
submitted (AUG-1999) to the EMBL/GenBank/TEMBL; AF177881; AAK43364.1; -
EMBL; AF177881; AAK43364.1; -
InterPro; IPR000276; GPCR_Rhodpsn.
Pf000001; 7tm_l: 1
PROSITE; PS00237; G_PROTEIN_RECEP_F1_1; UN
PROSITE; PS50262; G_PROTEIN_RECEP_F1_2; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SEQUENCE FROM N.A. Zhang Y., Ryder O.A.,
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Mammalia; Eutheria;
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DEC-2001 (TrEMBLrel. 19
MAR-2002 (TrEMBLrel. 20
chemokine receptor 5.
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                                                             GEKFRNYLLVFFQKHIAKRFCKCCRIFQQEAPERASSVYTRSTGEQEISVGL
                                                                                    GEKFRNYLLVFFQKHIAKRFCKCCSIFQQEAPERASSVYTRSTGEQEISVGL
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Primates;
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Pred. No. 5
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Eukaryota; Metazoa; (
Mammalia; Eutheria; i
Colobus.
                                                                                                                                                                                                                                                                                                                      09XT14;
01-NOV-1999
01-NOV-1999
01-DEC-2001
                   SEQUENCE FROM N.A.

Spearman P.W., Mburu D.N., Graham B.S.;

Spearman P.W., Mburu D.N., Graham B.S.;

*Dlfferential Utilization of CCR5 Molecules from Three Simian Species by the HIV-1 Envelope Glycoprotein.";

Submitted (APR-1999) to the EMBL/GenBank/DDBJ databases EMBL; AF141639; AAD32684.1;
                                                                                                                                                                                                                                                                                                                                                                                                      Q9XT14
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PROSITE; PS50262; G_PROTEIN_RECEP_F1_2; 1.
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Mammalia; Eutheria;
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NCBI_TaxID=66062,
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Primates;
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the EMBL/GenBank/DDBJ databases.
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Pred. No. 9.8e-146;
7; Mismatches 2;
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Craniata; Vertebrata;
Catarrhini; Cercopithe
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Pfam; PF00001; 7tm_1; 1.

PROSITE; PS00237; G_PROTEIN_RECEP.

PROSITE; PS50262; G_PROTEIN_RECEP.
                                                                                                                                                                                        Theropithecus gelada (Gelada baboon).
Eukaryota; Metazoa; Chordata; Craniata; V.
Mammalia; Eutheria; Primates; Catarrhini;
Cercopithecinae; Theropithecus.
NCBI_TaxID=9565;
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;; PS50262; G_PROTEIN_RECEP_F1_2;
                                             Similarity
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Submitted (AUG-1999)
EMBL; AF177883; AAK43
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NCBI_TaxID=66063;
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Zhang Y., Ryder O.A.,
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Mammalia; Eutheria;
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AR177883; AARK43366.1; -.
PPro; IPRO00276; GPC.Rhodpsn.
PF00001; 7tm.1; 1.
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TE; PS50262; G_PROTEIN_RECEP_F1_2; 1.
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Catarrhini; Cercopithecidae; Colobi
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SEQUENCE
 Papio anubis (Olive
Eukaryota; Metazoa;
Mammalia; Eutheria;
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Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Cercopithecidae;
Cercopithecinae; Miopithecus.
NCBI_TaxID=36231;
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EMBL; AF177886; AAK4
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Pro; IPR000276; GPCR_Rhodpsn.
PF00001; 7tm_1; 1.
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44; Conservative
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(TrEMBLrel. )
(TrEMBLrel. )
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       G_PROTEIN_RECEP_F1_1;
.G_PROTEIN_RECEP_F1_2;
 Chordata;
Primates;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                98.48; 97.78;
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CCR5
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Pred. No. 1.5e
5; Mismatches
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Last sequence up
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 Craniata; V
Catarrhini;
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Matches 344
AIDS Res. Hum. Retroviruses 0:0-0(1997).

ANDS Res. Hum. Retroviruses 0:0-0(1997).

EMBL; AP011538; AAB65738.1; -.

InterPro; IPR000276; GPCR_Rhodpsn.

Pfam; PF00001; 7tm_1; 1.

PRINTS; PR00237; G_PROTEIN_RECEP_F1_1; UNK
PROSITE; PS00237; G_PROTEIN_RECEP_F1_2; 1.

Receptor.
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SPARTMAN P.W., Mburu D.N., Graham B.S.;

SPARTMAN P.W., Mburu D.N., Graham B.S.;

SPARTMAN P.W., Mburu D.N., Graham B.S.;

SIMIAN Species by the HIV-1 Envelope Glycoprotein.";

Submitted (APR-1999) to the EMBL/GenBank/DDBJ databases.

EMBL, AF141640; AAD32885.1; -.

InterPro; IPR000276; GPCR_Rhodpsn.

Pfam; PF000001; 7tm_1; 1.

PRINTS; PR00237; GPCRRHODOPSN.

PROSITE; PS00237; GPCRHODOPSN.

PROSITE; PS00237; G_PROTEIN_RECEP_F1_1; UNKNOWN_1.

PROSITE; PS00262; G_PROTEIN_RECEP_F1_2; 1.
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NCBI_TaxID-9555;
[1]
                                                                                                                                                                                                                                                                                                        Pan troglodytes (Chimpanzec).
Eukaryota; Metazoa; Chordata;
Mammalla; Eutherla; Primates;
NCBI_TaxID=9598;
                                                                                                                                                                                                                                                                                                                                                                                                                                       01-JAN-1998 (TREMBLIGE). 05,
01-JAN-1998 (TREMBLIGE). 05,
01-DEC-2001 (TREMBLIGE). 19,
                                                                                                                                                                                                                                             SEQUENCE FROM N.A.
STRAIN-MACCR5-140A;
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al Similarity 97.7%;
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pred. No. 2.1e-145;
5; Mismatches 3;
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Last sequence update)
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343; Conserv
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MIVYELEWAPYNIVLLLNTEQEEEGLNNCSSSNRLDQAMQVTETLGMTHCCINPIIYAFV
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                        MIVYELEWAPYNIVLLLNTEQEFEGLNNCSSCNRLDQAMQVTETLGMTHCCINPIIYAFV
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352 AA;
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Pred. No. 2.
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1.6e-145;
les 3;
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Search completed: June 3, 2003, 15:21:41 Job time: 75.8765 secs

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1: /cgn2_6/ptodata/l/pubpaa/U
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6: /cgn2_6/ptodata/l/pubpaa/U
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10: /cgn2_6/ptodata/l/pubpaa/U
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Gapop 10.0 , Gapext 0.5
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Listing first 45 summaries
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./cgn2_6/ptodata/1/pubpaa/US06_NEW_PUB.pep:*
./cgn2_6/ptodata/1/pubpaa/US06_NEW_PUB.pep:*
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9 US-09-734-221A-14
10 US-09-759-841-2
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110 US-09-98-719-5
110 US-09-99-70-523-2
110 US-09-99-70-85-2
110 US-09-91-6523-2
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110 US-09-715-285-2
110 US-09-715-285-2
110 US-09-715-285-2
110 US-09-715-862A-2
110 US-09-719-879A-2
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Publication No. US20030092632A1
GENERAL INFORMATION:
APPLICANT: Dragic, Tatjana
APPLICANT: Olson, William C.
TITLE OF INVENTION: SULFATED CCR5 PEPTIDES FOR HIV-1 INFECTION
FILE REFERENCE: 61010-AB-1
CURRENT APPLICATION NUMBER: US/10/086,814
CURRENT FILING DATE: 2002-02-28
NUMBER OF SEQ ID NOS: 38
SOFTWARE: Patentin version 3.1
SEQ ID NO 1
LENGTH: 352
TYDE: PRT
ORGANISM: Homo sapiens
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US-10-086-814-1
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Best Local Similarity
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LLTIDRYLAVYHAVFALKARTVTFGVVTSVITWVVAVFASLPGIIFTRSQKEGLHYTCSS
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Pred. No. 1.8e-1
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Sequence 2, Appli
Sequence 3, Appli
Sequence 7, Appli
Sequence 7, Appli
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                                                                                                                                          Matches 352;
                                                                                                                                                                           Query Match
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                                                                                                                                                           Local
                                                                                                                                                                                                                                                                                                                                                                                                                     NAME: Jackson Esq., David A.
REGISTRATION NUMBER: 26,742
REFERENCE/DOCKET NUMBER: 1049-1-004 N2
TELECOMMUNICATION INFORMATION:
TELEPHONE: 201-487-5800
TELEFAX: 201-343-1684
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/666,020
FILING DATE: 19-JUN-1996
APPLICATION NUMBER: US 08/227,319
FILING DATE: 13-APR-1994
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version
CURRENT APPLICATION DATA:
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COMPUTER READABLE FORM:
                                                                                                                                                                                                                                               ORIGINAL SOURCE:
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                  TOPOLOGY: linear MOLECULE TYPE: protein
                                                                                                                                                                                                                                                                                                                                                                                      SEQUENCE CHARACTERISTICS:
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                61 LKSMTDIYLLNLAISDLFFLLIVPFWAHYAAAQWDFGNTMCQLLTGLYFIGFFSGIFFII 120
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                                                                                                                                                           Similarity
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                                                                     MDYQVSSPIYDINYYTSEPCQKINVKQIAARLLPPLYSLVFIFGFVGNMLVILILINCKR
LKSMTDIYLLNLAISDLFFLLTVPFWAHYAAAQWDFGNTMCQLLTGLYFIGFFSGIFFII
                                                                                                                                                                                                                                                                                                                                   LENGTH: 352 amino acids
TYPE: amino acid
STRANDEDNESS: single
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICATION NUMBER: US/09/734,221A FILING DATE: 11-Dec-2000
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                                                                                                                                          Conservative
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Pred. No. 1.8e-150;
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SEQ ID NO 2
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Patent No. US20010039026A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                               Matches
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Best Local (
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TITLE OF INVENTION: Assay Me-
FILE REFERENCE: PC10348APME
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PRIOR APPLICATION NUMBER:
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ORGANISM: Homo
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                                                        GEKFRNYLLVFFQKHIAKRFCKCCSIFQQEAPERASSVYTRSTGEQEISVGL
                                                                                                        MIVYFLFWAPYNIVLLLNTFQEFFGLNNCSSSNRLDQAMQVTETLGMTHCCINPIIYAFV
                                                                                                                          MIVYFLFWAPYNIVLLLUTFQEFFGLNNCSSSNRLDQAMQVTETLGMTHCCINFIIYAFV
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Dobbs, Susan
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Pred. No. 1.8e-150;
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Indels Length 352;

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                                                                                                                                                                                                                                                                                           US-09-796-202-1
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                                                                                                                                                                                                                              Sequence 1, Application US/09796202 Patent No. US20020068813A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SOFTWARE: PatentIn version 3.0 SEQ ID NO 15 LENGTH: 352
                                                       NUMBER OF SEQ ID NOS: 17
SOFTWARE: PatentIn versi
SEQ ID NO 1
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Best Local S
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APPLICANT: Tan Hehir, Christina
TITLE OF INVENTION: Binding Compounds and Methods For Identifying Binding Compounds
FILE REFERENCE: CNS-005
FILE REFERENCE: CNS-005
CURRENT APPLICATION NUMBER: US/09/813,653
CURRENT FILING DATE: 2001-03-20
PRIOR APPLICATION NUMBER: US 60/190,946
PRIOR FILING DATE: 2000-03-21
PRIOR FILING DATE: 2000-03-21
PRIOR APPLICATION NUMBER: US 60/190,996
PRIOR FILING DATE: 2000-03-21
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                                                                                                              APPLICANT: Dragic, Tatjana
APPLICANT: Olson, William
TITLE OF INVENTION: SULFATED CCR5 PEPTIDES FOR HIV-1 INFECTION
FILE REFERENCE: 2048/61010/JPW/SHS
CURRENT APPLICATION NUMBER: US/09/796,202
CURRENT FILING DATE: 2001-02-28
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PRIOR APPLICATION NUMBER: US 60/191,299
PRIOR FILING DATE: 2000-03-21
NUMBER OF SEQ ID NOS: 44
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                    LENGTH: 352
TYPE: PRT
ORGANISM: human
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                                                                           version 3.0
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US-09-938-719-5
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Patent No. US20020106742A1
GENERAL INFORMATION:
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                                                                                                                                                                                                           INFORMATION FOR SEQ ID NO: 5:
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MEDIUM TYPE: Floppy disk

COMPUTER: IBM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: Patentin Release #1.0, Ver

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/09/938,719

FILING DATE: 24-Aug-2001

CLASSIFICATION: <Unknown>

PRIOR APPLICATION DATA:

CLASSIFICATION DATA:

OCCUPATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT: SANSON, MICHEL
PARMENTIER, MARC
PARMENTIAL PARMENTAL                                                                                                                                                                                                                                                                   APPLICATION NUMBER: 09/626,939
FILING DATE: 27-JULY-2000
ATTORNEY/AGENT INFORMATION:
NAME: Altman, Daniel E
REGISTRATION NUMBER: 34,115
                                                                                              SEQUENCE CHARACTERISTICS:
LENGTH: 352 amino acids
TYPE: amino acid
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ADDRESSEE: Knobbe,
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STATE: CA
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                                                                 TOPOLOGY: linear
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TYPE: protein DESCRIPTION: 9
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Pred. No. 1.8e-150;
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RESULT 7
US-09-939-226-5
Sequence 5, Application US/09939226
Patent No. US20020110805A1
GENERAL INFORMATION:
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                                                                                            REFERENCE/DOCKET NUMBER: <Unknown>
INFORMATION FOR SEQ ID NO: 5:
SEQUENCE CHARACTERISTICS:
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                                                                                                                                                                                                                                                                                                                              COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS SOFTWARE: PETCATION Release #1.0, CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                      ZIP: 92660
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CORRESPONDENCE ADDRESS:
ADDRESSEE: Knobbe, Martens, Olson & Bear
STREET: 620 Newport Center Drive 16th Floor
MOLECULE TYPE: protein SEQUENCE DESCRIPTION: SEQ
                  TOPOLOGY: linear MOLECULE TYPE: protein
                                                                                                                                                                                                                                                       PRIOR APPLICATION DATA:
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                                                                                                                                                                                             ATTORNEY/AGENT INFORMATION:
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                                                                                                                                                                                                                                                                     APPLICATION NUMBER: US/09/939,226
FILING DATE: 24-Aug-2001
CLASSIFICATION: <Unknown>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GEKFRNYLLVFFQKHIAKRFCKCCSIFQQEAPERASSVYTRSTGEQEISVGL 352
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                                                          TYPE:
                                                                                                                                                     NAME: Altman, Daniel E
REGISTRATION NUMBER: 34,115
                                                                                                                                                                                                               APPLICATION NUMBER: 09/626,939 FILING DATE: 2000-07-27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     COUNTRY: U.S.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CITY: Newport Beach
STATE: CA
                                                                            LENGTH: 352 amino acids
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Conservative
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                                                          amino acid
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LIBERT, FREDERICK
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Pred. No. 1.8e-150;
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  <u>8</u>
    <u>ب</u>
                                                                                                                                                                                                                                                                                                                                                    Version
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US-09-938-703-5
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APPLICANT: SAMSON,
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                                                                                                                  INFORMATION
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                                                                                                                                                                                                                                                                                                                              COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS SOFTWARE: Patentin Release #1.0, CURRENT APPLICATION DATA:
                    MOLECULE
                                                                                            MATION FOR SEQ ID NO: 5:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                       APPLICATION NUMBER: 09/626,939 FILING DATE: 2000-07-27 ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                     PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                          COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CORRESPONDENCE ADDRESS:
ADDRESSEE: Knobbe, Martens, Olson & Bear
STREET: 620 Newport Center Drive 16th Floor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TITLE OF INVENTION: ACTIVE AND INACTIVE CC-CHEMOKINES RECEPTOR
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                                                                                                                                                                                                                                                                                         APPLICATION NUMBER: US/09/938,703 FILING DATE: 24-Aug-2001
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                                    TOPOLOGY: linear
                                                          TYPE:
                                                                                                                                                       NAME: Altman, Daniel E REGISTRATION NUMBER: 34,115
                                                                                                                                                                                                                                                                         CLASSIFICATION: <Unknown>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       STATE: CA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CITY: Newport Beach
                                                                              LENGTH: 352 amino acids
                                                                                                                                    REFERENCE/DOCKET NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     COUNTRY: U.S.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       OF SEQUENCES:
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TYPE: protein DESCRIPTION: SEQ
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                                                          amino acid
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LIBERT, FREDERICK
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                                                                                                                                                                                                                                                                                                                                                  Release #1.0,
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Pred. No. 1.8e-150;
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Matches

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RESULT 9
US-10-106-623-2
; Sequence 2, Application US/10106623
; Patent NO. US20020150888A1
; Patent INFORMATION:
; GENERAL INFORMATION:
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           APPLICATION NUMBER: 08/771,276

APPLICATION NUMBER: 08/771,276

FILING DATE: <UNKNOWN>

ATTORNEY/AGENT INFORMATION:

NAME: NO. US20020150888Aland, Greta E. REGISTRATION NUMBER: 35,302

REFERENCE/DOCKET NUMBER: 27866/33670

TELECOMMUNICATION INFORMATION:

TELEPHONE: 312-474-6300

TELEPHONE: 312-474-6300

TELEFAX: 312-474-6448

INFORMATION FOR SEQ ID NO: 2:

SEQUENCE CHARACTERISTICS:
LENGTH: 352 amino acids

TYPE: amino acids

TYPE: amino acids

TYPE: amino acids

TYPE: amino acids
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Best Local
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APPLICATION NUMBER: US/10/106,623
FILING DATE: 26-Mar-2002
CLASSIFICATION: <Unknown>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Schweickart, Vicky L.
RAPOTT, CATOL J.
TITLE OF INVENTION: Chemokine Receptor Materials
NUMBER OF SEQUENCES: 20
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STATE: Illinois
COUNTRY: USA
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OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
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                                                                                                                                                                                                                                                                                                                                                                                                            ZIP: 60606
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & Borun
STREET: 6300 Sears Tower, 233 S. Wacker Drive
                                                                                                                                                                                                                                                                                                                                                                           MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                             APPLICATION DATA:
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Pred. No. 1.8e-150;
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OTHER INFORMATION: /- "88C amino;
SEQUENCE DESCRIPTION: SEQ ID NO: 2:
US-10-106-623-2
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                                                                                                                                                                                          ; TYPE: PRT
; ORGANISM: Homo
US-09-813-653-17
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                                                                                                                             Query Match
Best Local Similarity
Matches 351; Conserv
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SEQ ID NO 17
LENGTH: 352
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Best Local Similarity 100
Matches 352; Conservative
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APPLICANT: See, Raymond
TITLE OF INVENTION: Binding Compounds and Methods For Identifying Binding Compound
FILE REFERENCE: CNS-005
CURRENT APPLICATION NUMBER: US/09/813,653
CURRENT FILING DATE: 2001-03-20
PRIOR APPLICATION NUMBER: US 60/190,946
PRIOR FILING DATE: 2000-03-21
PRIOR APPLICATION NUMBER: US 60/190,996
PRIOR PILING DATE: 2000-03-21
PRIOR FILING DATE: 2000-03-21
PRIOR FILING DATE: 2000-03-21
PRIOR FILING DATE: 2000-03-21
NUMBER: US 60/191,299
PRIOR FILING DATE: 2000-03-21
NUMBER: OS SEQ ID NOS: 44
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APPLICANT: Wilson, Carol
APPLICANT: See, Raymond
APPLICANT: Tan Hehir, Ch
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                           LKSMTDIYLLNLAISDLEFLLTVPFWAHYAAAQWDFGNTMCQLLTGLYFIGFFSGIFFII 120
                                                        GEKFRNYLLVFFQKHIAKRFCKCCSIFQQEAPERASSVYTRSTGEQEISVGL
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Pred. No. 5.8e-150;
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Pred. No. 1.8e-150;
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US-10-232-686-2
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PRIOR FILING DATE: 1999-06-25
PRIOR PELICATION NUMBER: 09/195,662
PRIOR FILING DATE: 1998-11-18
PRIOR APPLICATION NUMBER: 08/466,343
PRIOR FILING DATE: 1995-06-06
NUMBER OF SEQ ID NOS: 9
SOFTWARE: Patentin version 3.0
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Best Local S
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LENGTH: 3
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TITLE OF INVENTION: Human G-Protein Chemokine Receptor
FILE REFERENCE: 1488.115000N
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CURRENT FILING DATE: 2002-09-03
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HFPYSQYQFWKNFQTLKIVILGLVLPLLVMVICYSGILKTLLRCRNEKKRHRAVRLIFTI
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99.7%;
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Pred. No. 8.6e-150;
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RESULT 12

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US-09-779-879A-22
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SEQ ID NO 2
LENGTH: 352
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APPLICANT: Li, Yi
APPLICANT: Ruben, Steven,
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Best Local Similarity
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APPLICANT: Li, Yi
APPLICANT: Ruben, Steven, M.
APPLICANT: Ruben, Steven, M.
TITLE OF INVENTION: Human G-protein Chemokine Receptor
FILE REFERENCE: 1488.115000A
CURRENT APPLICATION NUMBER: US/09/779,879A
CURRENT FILING DATE: 2001-02-09
PRIOR APPLICATION NUMBER: US 60/181,258
PRIOR FILING DATE: 2000-02-09
PRIOR FILING DATE: 2000-03-09
PRIOR FILING DATE: 2000-03-09
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                                                                                                                                                                     APPLICANT: Rosen, APPLICANT: Rosch
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5. US20010000241A1
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1995-06-06
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99.7%;
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Pred. No. 8.6e
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8.6e-150;
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PRIOR APPLICATION NUMBER: US 60/:
PRIOR FILING DATE: 2000-09-22
NUMBER OF SEQ ID NOS: 58
SOFTWARE: Patchtin version 3.0
SEQ ID NO 22
LENGTH: 352
TYPE: PRT
ORGANISM: Homo sapiens
US-09-779-879a-22
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                                                                                                                                                                               APPLICANT: Ruben, Steven, M.
TITLE OF INVENTION: Human G-protein Chemokine Rec
FILE REFERENCE: 1488.115000C
CURRENT APPLICATION NUMBER: US/09/779,880A
CURRENT FILING DATE: 2001-02-09
PRIOR APPLICATION NUMBER: US 60/181,258
PRIOR FILING DATE: 2000-03-09
PRIOR APPLICATION NUMBER: US 60/187,999
PRIOR APPLICATION NUMBER: US 60/234,336
PRIOR FILING DATE: 2000-03-09
PRIOR FILING DATE: 2000-09-22
NUMBER OF SEQ ID NOS: 58
PRIOR FILING DATE: 2000-09-22
NUMBER OF SEQ ID NOS: 58
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                                                                                                        ; ORGANISM: Homo sapiens 
US-09-779-880A-22
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Best Local S
Matches 351
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Best Local
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                                                                                                                                             SOFTWARE: PatentIn version 3.0 SEQ ID NO 22 LENGTH: 352
                                                                                                                                                                                                                                                                                                                                                                      APPLICANT: Rosen,
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                                                                                                                                  TYPE: PRT
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CURRENT APPLICATION NUMBER: US/01
CURRENT FILING DATE: 1998-11-18
PRIOR APPLICATION NUMBER: 08/41
PRIOR FILING DATE: 1995-06-06
NUMBER OF SEQ ID NOS: 9
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US-09-195-662A-2
                                                                                                                                                                                                                                                                                                                                                                                                                                        ; OTHER INFORMATION: US-09-195-662A-2
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SEQ ID NO 2
LENGTH: 352
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Best Local S
Matches 351
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 2, Application US/09195662A Patent No. US20020076745A1 GENERAL INFORMATION: APPLICANT: L1, Y1 APPLICANT: Ruben, X Eeven, M. THITTE OF THISTONIANT.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FILE REFERENCE: 14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TYPE: PRT ORGANISM: Artificial Sequence: Genomic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FEATURE:
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                                                                                                                                                                                                                                                                                                            GEKFRNYLLVFFQKHIAKRFCKCCSIFQQEAPERASSVYTRSTGEQEISVGL 352
                                                                              MIVYFLFWAPYNIVLLLNTFQEFFGLNNCSSSNRLDQAMQVTETLGMTHCCINPIIYAFV
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                                                                                                                         HFPYSQYQFWKNFQTLKIVILGLVLPLLVMVICYSGILKTLLRCRNEKKRHRAVRLIFTI
GEKFRNYLLVFFQKHIAKRFCKCCSIFQQEAPERASSVYTRSTEEQEISVGL
                                                             MIVYFLFWAPYNIVLLLNTFQEFFGLNNCSSSNRLDQAMQVTETLGMTHCCINPIIYAFV
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Search completed: June 3, 2003, 15:34:30 Job time : 46.6279 secs

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Result
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Maximum Match 100%
Listing first 45 summaries
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Maximum DB seq length: 200000000
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Perfect score:
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Gapop 10.0 , Gapext 0.5
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Copyright (c) 1993 - 2003 Compus
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0 US-09-759-841-2
0 US-09-779-880A-22
0 US-09-779-880A-22
0 US-09-813-653-15
0 US-09-813-653-15
0 US-09-195-652A-2
0 US-09-339-912A-2
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US-09-939-226-6
US-09-938-703-6
US-09-938-719-4
US-09-938-703-6
US-09-938-703-6
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22, Appli
22, Appli
15, Appli
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5, Appli
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355	355	355	375	355	355	329	329	329	329	360	360	360	360	347	344	344	344	360	352	352	352	352	352	352	352
10	10	10	9	10	10	10	10	10	10	10	10	10	5	10	10	10	9	10	12	10	10	10	12	10	10
US-09-938-703-9	US-09-939-226-9	US-09-938-719-9	US-10-219-834-78	US-09-960-547-1	US-09-961-068-1	US-09-502-783A-9	US-09-339-912A-9	-09-195	US-09-725-285-9	US-09-938-703-7	US-09-939-226-7	US-09-938-719-7	US-09-131-827A-2	US-09-104-792-3	US-09-779-880A-9	US-09-779-879A-9	US-10-232-686-9	ÿS-09-131-827A-20	US-10-106-623-20	US-09-779-880A-2	US-09-779-879A-2	-813	US-10-106-623-2	US-09-502-783A-2	US-09-938-703-5
9,	9	e 9,	78,	۲	Sequence 1, Appli	9	•	Sequence 9, Appli	9	7	Sequence 7, Appli	7	Sequence 2, Appli	w	<ul> <li>Sequence 9, Appl1</li> </ul>	9	Sequence 9, Appli	ລ	20,	ພ	Sequence 2, Appli	17	-	ພ	Sequence 5, Appli

## ALIGNMENTS

US-09-938-719-6

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Sequence 6, Application US/09938719
Patent No. US2002010642A1

GENERAL INFORMATION: MICHEL
PARMENTIER, MARC
VASSART, GILBERT
LIBERT, FREDERICK
TITLE OF INVENTION: ACTIVE ND INACTIVE CC-CHEMOKINES RECEPTOR
NUMBER OF SEQUENCES: 17

CARESPONDENCE ADDRESS:
AND NUCLEIC ACID MOLECULES ENCODING SAID RECEPTOR
NUMBER OF SEQUENCES: 17

CARESPONDENCE ADDRESS:
AND NUCLEIC ACID MOLECULES ENCODING SAID RECEPTOR
NUMBER: 620 Newport Center Drive 16th Floor
STATE: CA
COUNTRY: U.S.A.
ZIP: 92660

COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PATENTING PATE: 24-Aug-2001
CLASSIFICATION NUMBER: US/09/938,719
FILING DATE: 24-Aug-2001
PRIOR APPLICATION NUMBER: US/09/938,719
FILING DATE: 21-GULT-2000
ATTOREY, AGENT INFORMATION:
NAME: Altenn, Daniel E
REGISTRATION NUMBER: 34,115
REFERENCE/DOCKET NUMBER: 34,115
REFERENCE/DOCKET NUMBER: 34,115
REFERENCE/DOCKET NUMBER: 34,115
REFERENCE/DOCKET NUMBER: 34,115
SEQUENCE CHARACTERISTICS:
SEQUENCE CHARACTERISTICS:
SEQUENCE CHARACTERISTICS:
SEQUENCE DESCRIPTION: SEQ ID NO: 6:
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                                                                              Query Match
Best Local :
                                                           Matches
                                                                                                                                                                                                                                                                          REFERENCE/DOCKET NUMBER: <Unknown>
INFORMATION FOR SEQ ID NO: 6:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Local Similarity
                                                                                                                                                                                                                                                                                                                                                                         CURRENT APPLICATION UNMER: US/09/939,226
APPLICATION NUMBER: US/09/939,226
FILING DATE: 24-Aug-2001
CLASSIFICATION: <Unknown>
PRIOR APPLICATION DATE:
APPLICATION UNMBER: 09/626,939
FILING DATE: 2000-07-27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NUMBER OF SEQUENCES: 17
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                    SEQUENCE CHARACTERISTICS:
LENGTH: 215 amino acids
TYPE: amino acid
                                                                                                                                                                                                                                                                                                                 ATTORNEY/AGENT INFORMATION:
NAME: Altman, Daniel E
REGISTRATION NUMBER: 34,115
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TITLE OF INVENTION: ACTIVE AND INACTIVE CC-CHEMOKINES RECEPTOR AND NUCLEIC ACID MOLECULES ENCODING SAID R
                                                                                                                                                        MOLECULE TYPE: protein SEQUENCE DESCRIPTION: SEQ ID NO: 6:
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1 MDYQVSSPIYDINYYTSEPCQKINVKQIAARLLPPLYSLVFIFGFVGNMLVILILINCKR 60
                                                                              Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25 (EPO)
                                                                                                                                                                                                  TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             MEDIUM TYPE: Floppy disk
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STREET: 620 Newport Center Drive 16th Floor
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Pred. No. 4.2e-104;
; Mismatches 0;
                                                           Score 1122; DB 10;
Pred. No. 4.2e-104;
); Mismatches 0;
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US-09-938-703-6
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                                                                                                                                                                                                                                           Query Match
Best Local Similarity
                                                                                                                                                                                                                          Matches
                                                                                                                                                                                                                                                                                                                                                                                                                  REFERENCE/DOCKET NUMBER: INFORMATION FOR SEQ ID NO: 6: SEQUENCE CHARACTERISTICS:
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NAME: Altman, Daniel E
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      LLTIDRYLAVVHAVFALKARTVTFGVVTSVITWVVAVFASLPGIIFTRSQKEGLHYTCSS
                                                                                    LKSMTDIYLLNLAISDLFEILIYPFWAHYAAAQWDFGNTMCQLLTGLYFIGFFSGIFFII 120
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                                                                LKSMTDIYLLNLAISDLFFLLTVPFWAHYAAAQWDFGNTMCQLLTGLYFIGFFSGIFFII
                                                                                                                                                                                                                                                                                                                                                             LENGTH: 215 amino acids TYPE: amino acid TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICATION NUMBER: 09/626;939 FILING DATE: 2000-07-27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FILING DATE: 24-Aug-2001 CLASSIFICATION: <Unknown>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS
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STREET: 620 Newport Center Drive 16th Floor
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SOFTWARE:
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LIBERT, FREDERICK
INVENTION: ACTIVE AND INACTIVE CC-CHEMOKINES RECEPTOR
AND NUCLEIC ACID MOLECULES ENCODING SAID RE
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                                                                                                                                                                                                                                           100.0%;
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Pred. No. 4.2e-104;
; Mismatches 0;
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SAID RECEPTOR

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; MOLECULE TYPE: protein ; SEQUENCE DESCRIPTION: SEQ ID NO: US-09-938-719-4
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US-09-938-719-4
                    RESULT 5
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INFORMATION FOR SEQ ID NO: 4:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICATION NUMBER: 09/626,939
FILING DATE: 27-JULY-2000
ATTORNEY/AGENT INFORMATION:
NAME: Altman, Daniel E
REGISTRATION NUMBER: 34,115
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICATION NUMBER: US/09/938,719
FILING DATE: 24-Aug-2001
CLASSIFICATION: cUnknown>
PRIOR APPLICATION DATA:
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CORRESPONDENCE ADDRESS:
ADDRESSEE: Knobbe, Martens, Olson & Bear
STREET: 620 Newport Center Drive 16th Floor
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COMPUTER READABLE FORM:
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LIBERT, FREDERICK
TITLE OF INVENTION: ACTIVE AND INACTIVE CC-CHEMOKINES RECEPTOR
AND NUCLEIC ACID MOLECULES ENCODING SAID RECEPTOR ...
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                                                                                                                                                                                                                                                                                                                                                                                                                          Similarity
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                                                                                                                     HFPY 184
                                                                                                                                                           LTTIDRYLAVVHAVFALKARTVTFGVVTSVITWVVAVFASLPGIIFTRSQKEGLHYTCSS
                                                                                                                                                                                                LLTIDRYLAVVHAVFALKARTVTFGVVTSVITWVVAVFASLPGIIFTRSQKEGLHYTCSS 180
                                                                                                                                                                                                                                          LKSMTDIYLLNLAISDLFFLLTVPFWAHYAAAQWDFGNTMCQLLTGLYFIGFFSGIFFII
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS SOFTMARE: PATCHTIN RCLOBBE #1.0, Version #1.25 ENT APPLICATION DATA:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TYPE: amino acid
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                                                                                                                                                                                                                                                                                                                                                                                                 Score 958; DB 10;
; Pred. No. 7.5e-88;
                                                                                                                                                                                                                                                                                                                                                                                                                                         Length 184;
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Sequence 4, Application:
Patent No. US20020110805A1

Patent No. US20020110805A1

PARMENTION:
PARMENTIER, MARC
VASSART, GILBERT
LIBERT, FREDERICK
LIBERT, FREDERICK
LIBERT ACTIVE AND
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TOPOLOGY: linear
; MOLECULE TYPE: protein
; SEQUENCE DESCRIPTION: SEQ
US-09-939-226-4
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                                                                                                                                                        RESULT 6
US-09-938-703-4
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                                                                         Sequence 4, Application US/09938703
Patent Mo. US20020110870A1
GENERAL INFORMATION:
APPLICANT: SAMSON, MICHEL
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Best Local Similarity
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MEDIUM TYPE: Flopp
COMPUTER: IBM PC c
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OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PAtentin Release #1.0, Version #1.25 (EPO)
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/939,226
FILING DATE: 24-Aug-2001
CLASSIFICATION: <Unknown>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SEQUENCE CHARACTERISTICS:
LENGTH: 184 amino acids
TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ATTORNEY/AGENT INFORMATION:
NAME: Altman, Daniel E
REGISTRATION NUMBER: 34,115
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                                                                                                                                                                                                                                                                                                                                         121 LLTIDRYLAVVHAVFALKARTVTFGVVTSVITWVVAVFASLPGIIFTRSQKEGLHYTCSS 180
                                                                                                                                                                                                                                        181 HFPY 184
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    MDYQVSSPIYDINYYTSEPCQKINVKQIAARLLPPLYSLVFIFGFVGNMLVILILINCKR 60
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        COUNTRY: U.S.A.
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VASSART, GLUZZ
                                   SAMSON, MICHEL PARMENTIER, MARC VASSART, GILBERT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            85.4%; Score 958; DB 10; 100.0%; Pred. No. 7.5e-88; O: Mismatches 0;
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US-10-232-686-2
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PRIOR APPLICATION NUMBER: 09/339,912
PRIOR FILING DATE: 1999-06-25
PRIOR APPLICATION NUMBER: 09/339,912
PRIOR APPLICATION NUMBER: 09/195,662
PRIOR FILING DATE: 1998-11-18
PRIOR APPLICATION NUMBER: 08/466,343
PRIOR FILING DATE: 1995-06-06
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Matches 184;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
                                                                                                                                                                                                                                                GENERAL INFORMATION:
                                                                                                                                                                                                                                                                Sequence 2, Application US/10232686 Publication No. US20030023044A1
                                                                                                                            APPLICANT: Ruben, Steven M.
TITLE OF INVENTION: Human G-Protein Chemokine Receptor (CCR5) HDGNR10
TILE REFERENCE: 1488.115000N
CURRENT APPLICATION NUMBER: US/10/232,686
CURRENT FILING DATE: 2002-09-03
                                                                                                                                                                                                          APPLICANT: Li, Yi APPLICANT: Ruben
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             REFERENCE/DOCKET NUMBER: INFORMATION FOR SEQ ID NO: 4: SEQUENCE CHARACTERISTICS:
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CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICATION NUMBER: 09/626,939 FILING DATE: 2000-07-27 ATTORNEY/AGENT INFORMATION:
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STREET: 620 Newport Center Drive
CITY: Newport Beach
STATE: CA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICATION NUMBER: US/09/938,703 FILING DATE: 24-Aug-2001 CLASSIFICATION: <Unknown>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        MEDIUM TYPE: Floppy disk COMPUTER: IBM PC compati
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                LLTIDRYLAVVHAVFALKARTVTFGVVTSVITWVVAVFASLPGIIFTRSQKEGLHYTCSS 180
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                                                                                                                                                                                                                                                                                                                                                                                                                                                        TOPOLOGY: linear
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TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         NAME: Altman, Daniel E
REGISTRATION NUMBER: 34,115
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SOFTWARE: PatentIn Release #1.0,
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Pred. No. 7.5e-88;
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16th Floor
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Publication No. Sequence 14,

Application US/09734221A No. US20030096221A1

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; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-232-686-2
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US-10-086-814-1
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RESULT 9
US-09-734-221A-14
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Best Local
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Best Local Similarity
Matches 184; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT: Dragic, Tatjana
APPLICANT: Olson, William C.
TITLE OF INVENTION: SULFATED CCR5 PEPTIDES FOR HIV-1 INFECTION
FILE REFERENCE: 61010-AB-1
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                                                                                                                                                                                                                                                                                                                                                                                                                        CURRENT APPLICATION NUMBER: US/10/086,814
CURRENT FILING DATE: 2002-02-28
                                                                                                                                                                                                                                                                                                                                                                                              SOFTWARE: PatentIn version 3.1
                                                                                                                                                                                                                                                                                                                                                                                                              NUMBER OF SEQ ID NOS: 38
                                                                                                                                                                                                                                                                                                                                                        TYPE: PRT
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                                                                                                                                                                                                                  Similarity 100.
84; Conservative
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                                                                                                          Homo sapiens
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100.0%; Pred. No. 1.6e-87;
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                                                                                                                                                                                                                                                                                                     Length 352;
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REGISTRATION NUMBER: 26,742
REFERENCE/DOCKET NUMBER: 1049-1-004 N2
TELECOMMUNICATION INFORMATION:
TELEPHONE: 201-487-5800
TELEPHONE: 201-487-5804
INFORMATION FOR SEQ ID NO: 14:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICATION NUMBER: US/09/734,221A
FILING DATE: 11-Dec-2000
CLASSIFICATION: CUNKNOWN>
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/666,020
FILING DATE: 19-JUN-1996
APPLICATION NUMBER: US 08/227,319
FILING DATE: 13-APR-1994
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           STRANDEDNESS: single TOPOLOGY: linear MOLECULE TYPE: protein HYPOTHETICAL: NO ORIGINAL SOURCE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CORRESPONDENCE ADDRESS:
ADDRESSEE: David A. Jackson, Esq.
STREET: 411 Hackensack Ave, Continental Plaza,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ORGANISM: Homo sapiens SEQUENCE DESCRIPTION: SEQ ID NO: 14:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ATTORNEY/AGENT INFORMATION
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MEDIUM TYPE: Floppy disk
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                                                                                                                                               LKSMTDIYLLNLAISDLFFLLTVPFWAHYAAAQWDFGNTMCQLLTGLYFIGFFSGIFFII
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    MDYQVSSPIYDINYYTSEPCQKINVKQIAARLLPPLYSLVFIFGFVGNMLVILILINCKR 60
HFPY 184
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STATE: New Jersey
                                                                                                                                                                                                                             LLTIDRYLAVVHAVFALKARTVTFGVVTSVITWVVAVFASLPGIIFTRSQKEGLHYTCSS 180
                                                                         HFPY 184
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MACROPHAGE-TROPHIC HIV, AND DIAGNOSTIC AND THERAPEUTIC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           LITTMAN, DAN R.
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US-09-725-285-2
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                                                                                                                                                   APPLICANT: Dobbs, Susan
APPLICANT: Perros, Manoussos
TITLE OF INVENTION: Assay Method
FILE REFERENCE: PC10348APME
CURRENT APPLICATION NUMBER: US/09/759,841
CURRENT FILLING DATE: 2001-01-12
PRIOR APPLICATION NUMBER: GB 0000661.9
PRIOR APPLICATION NUMBER: GB 0000663.5
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                                                                                                                                                                                                                                                                                                                                   GENERAL INFORMATION:
                                                 SOFTWARE:
SEQ ID NO 2
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                                                                                                   PRIOR FILING DATE: 2000-0
PRIOR APPLICATION NUMBER:
PRIOR FILING DATE: 2000-0
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PRIOR FILING DATE: 1998-11-18
PRIOR APPLICATION NUMBER: 08/466,343
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CURRENT FILING DATE: 2000-11-29
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                                                                                     NUMBER OF SEQ ID NOS:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TYPE: PRT ORGANISM: Artificial Sequence: Genomic
                LENGTH: 352
TYPE: PRT
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ORGANISM: Homo sapiens
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       85.4%; Score 958; DB 10; llarity 100.0%; Pred. No. 1.6e-87; Conservative 0; Mismatches 0;
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                                                                                                                     GB 0000659.3
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US-09-759-841-2

Query Match Best Local Similarity

85.4%;

Score 958; DB 10; Pred. No. 1.6e-87;

Length 352;

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US-09-779-879A-22
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; ORGANISM: Homo sapiens
US-09-779-879A-22
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RESULT 13
US-09-779-880A-22
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LENGTH: 352
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TITLE OF INVENTION: Human G-protein Chemokine Receptor (CCR5) HDGNR10 FILE REFEBENCE: 1488.115000A CURRENT APPLICATION NUMBER: US/09/779,879A CURRENT FILING DATE: 2001-02-09 PRIOR APPLICATION NUMBER: US 60/181,258 PRIOR APPLICATION NUMBER: US 60/181,258 PRIOR FILING DATE: 2000-02-09 PRIOR FILING DATE: 2000-03-09 PRIOR FILING DATE: 2000-03-09 PRIOR FILING DATE: 2000-03-09 PRIOR FILING DATE: 2000-03-09
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NUMBER OF SEQ ID NOS: 58
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                                                                                                                                                                                                                                                                                                                                                 Local Similarity
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                                                                   HFPY 184
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TYPE: PRT; ORGANISM: Homo sapiens US-09-813-653-15
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                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 15, Application US/09813653 Patent No. US20020064770A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRIOR APPLICATION NUMBER: US 60/181,258
PRIOR FILING DATE: 2000-02-09
PRIOR APPLICATION NUMBER: US 60/187,999
PRIOR FILING DATE: 2000-03-09
PRIOR APPLICATION NUMBER: US 60/234,336
PRIOR FILING DATE: 2000-09-22
PRIOR FILING DATE: 2000-09-22
                                                                             SOFTWARE: P
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CURRENT FILING DATE: 2001-02-09
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT: Ruben, Steven, M.
TITLE OF INVENTION: Human G-protein Chemokine Receptor (CCR5) HDGNR10
FILE REFERENCE: 1488.115000C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT: Rosen,
                                                                                                                                                                                                                                                           CURRENT APPLICATION NUMBER: US/09/813,653
CURRENT FILING DATE: 2001-03-20
                                                                                                                                                                                                                                                                                                   APPLICANT: See, Raymond
APPLICANT: Tan Hehir, Christina
TITLE OF INVENTION: Binding Compounds and Methods For Identifying Binding Compound
FILE REFERENCE: CNS-005
                                                                                                                 PRIOR APPLICATION NUMBER: US 60/191,299
PRIOR FILING DATE: 2000-03-21
NUMBER OF SEQ ID NOS: 44
                                                                                                                                                                           PRIOR APPLICATION NUMBER: US 60/190,946
PRIOR FILING DATE: 2000-03-21
PRIOR APPLICATION NUMBER: US 60/190,996
PRIOR FILING DATE: 2000-03-21
                                                                                                                                                                                                                                                                                                                                                                              APPLICANT: Nestor, John APPLICANT: Wilson, Carol
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Sequence 1, Application US/09796202

Patent No. US20020068813A1

GENERAL INFORMATION:
APPLICANT: Dragic, Tatjana
APPLICANT: Olson, William
TITLE OF INVENTION: SULFATED CCR5 PEPTIDES FOR HIV-1 INFECTION
FILE REFERENCE: 2048/61010/JPW/SHS
CURRENT APPLICATION NUMBER: US/09/796,202
CURRENT FILING DATE: 2001-02-28
NUMBER OF SEQ ID NOS: 17
SOFTWARE: Patentin version 3.0
SEQ ID NO 1
LENCTH: 352
TYPE: PRT
ORGANISM: human
US-09-796-202-1
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Search completed: June 3, 2003, 15:34:30 Job time: 22.3721 secs
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/SIDS2/gcgdata/geneseq/geneseqp-embl/AA1981.DAT:*
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## SUMMARIES

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958	958	958	958	958	958	958	958	1122	1122	Score
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AAB62948	AAG80111	ABB56342	AAW88232	AAW23835	AAW27123	AAW27407	AAW27406	AAW88238	AAW27408	ID
Human HIV-1 co-rec	Human CCR5 protein	Non-endogenous hum	HIV-1 co-receptor	Human CC chemokine	Human chemokine re	Human CCR5. Homo	Inactive human CCR	HIV-1 co-receptor	Inactive human CCR	Description

WPI; 1997-479829/44

## ALIGNMENTS

RESULT 1 AAW27408 04-SEP-1997: cancer; atherosclerosis; autoimmune disorder. Inactive; human Cys-Cys chemokine receptor 5; CCR5;
human immunodeficiency virus; type 1; type 2; HIV-1; HIV-2;
predisposition; resistance; diagnosis; treatment; prevention; AAW27408; AAW27408 standard; Protein; Libert F, 06-AUG-1996; 01-MAR-1996; 28-FEB-1997; WO9732019-A2 Homo sapiens. asthma; Inactive human CCR5 14-APR-1998 (first entry) (EURO-) EUROSCREEN SA. inflammatory disease; rheumatoid arthritis; glomerulonephritis; sthma; idiopathic pulmonary fibrosis; psoriasis; viral infection; Parmentier M, 96EP-0870102 96EP-0870021 97WO-BE00023 Samson M, 215 3 Vassart <u>و</u>

N-PSDB; AAT90118

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AAW88238
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                                                                                                                                                                              Domain
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                idiopathic pulmonary fibrosis and psoriasis, viral infections, especially human immunodeficiency virus type 1 or type 2 (HIV-1 or HIV-2) infection, cancer, atherosclerosis and autoimmune disorders. Subjects that express the inactive receptor have a predisposition,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   The present sequence is an inactive human CC (Cys-Cys) chemokine receptor 5 (CCR5), which lacks the last 3 transmembrane regions and the regions involved in G protein-coupling. CCR5 or its cDNA can used to diagnose, treat and/or prevent inflammatory diseases, e.g. rheumatoid arthritis, glomerulonephritis, asthma, filmnathic milmnatoid arthritis, glomerulonephritis, asthma,
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100.0%; P
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Pred. No. 1.4e-125;
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180 180

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Query Match Best Local Similarity

Matches

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Conservative

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100.0%;

Score 1122; Pred. No. 1 Mismatches

DB 20; .4e-125; 0,

215; 0

Indels Length

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designated CCR5 delta32, that includes the first 4 transmembrane domains of wild-type CCR5 (see AAW88332), but lacks transmembrane C domains 5-7. CCR5 serves as a co-receptor for infection by mecrophage-tropic (wtropic) strains of HIV-1. Individuals C infection, but heterozygous individuals are susceptible. The C infection, but heterozygous individuals are susceptible. The C CR5 constitution additionally relates to the identification of variant C CR5. The detection of CCR5 variants may be used to identify C CCR5m303 (see AAW88331), which lacks transmembrane domains 3-7 of C CR5m303 (see AAW88331), which lacks transmembrane domains 3-7 of C CR5m303 (see AAW88331), which lacks transmembrane domains 3-7 of C CR5m303 (see AAW88331), which lacks transmembrane domains 3-7 of C CR5m303 (see AAW88331), which lacks transmembrane domains 3-7 of C CR5m303 (see AAW88331), which lacks transmembrane domains 3-7 of C CR5m303 (see AAW88331), which lacks transmembrane to identify a detection who, if infected, may exhibit slower progression to C AIDS. Probes and primers (see AAW84127-36) are provided for use in method is provided for inhibiting HIV-1 infection of a cell expressing the CCR5 receptor. This involves introduction a monator
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PR XX PA XX PA XX PI DR
                   expressing the CCR5 receptor. This involves introducing a nucleic acid encoding a CCR5 variant into the cell, thereby reducing the number of functional CCR5 molecules present on the cell surface.
  Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                          This is the amino acid sequence of a CCR5 variant protein, designated CCR5-delta32, that includes the first 4 transmembrane domains of wild-type CCR5 (see AAW88232), but lacks transmembrane
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Disclosure; Page 38-39; 55pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         New CCR5 variant protein of the HIV-1 co-receptor - useful in developing resistance of CCR5-expressing cells to HIV-1 infection
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       N-PSDB;
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215 AA;
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AAW27406
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       Inactive; human Cys-Cys chemokine receptor-5; CCR5; human immunodeficiency virus; type 1; type 2; HIV-1; HIV-2; predisposition; resistance; diagnosis; treatment; prevention; inflammatory disease; rheumatoid arthritis; glomerulonephritis; asthma; idiopathic pulmonary fibrosis; psoriasis; viral infection;
cancer; atherosclerosis; autoimmune disorder
                                                                                                                                                              14-APR-1998 (first entry)
                                                                                                                                                                                                                                      AAW27406 standard;
                                                                                                                               Inactive human CCR5.
                                                                                                                                                                                                          AAW27406;
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                                                                                                                                                                                                                                                                                                                                     181 HFPYIKDSHLGAGPAAACHGHLLLGNPKNSASVSK 215
                                                                                                                                                                                                                                                                                                                                                                                                     121 LLTIDRYLAVVHAVEALKARTVTEGVVTSVITWVVAVEASLPGIIETRSOKEGLHYTCSS
                                                                                                                                                                                                                                                                                                                  HFPYIKDSHLGAGPAAACHGHLLLGNPKNSASVSK 215
                                                                                                                                                                                                                                                                                                                                                                                LLTIDRYLAVVHAVFALKARTVTFGVVTSVITWVVAVFASLPGIIFTRSQKEGLHYTCSS
                                                                                                                                                                                                                                                                                                                                                                                                                                                  LKSMTDIYLLNLAISDLFFLLTVPFWAHYAAAQWDFGNTMCQLLTGLYFIGFFSGIFFII 120
                                                                                                                                                                                                                                    Protein;
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PR PR XXX
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AAW27407
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Best Local Sim
Matches 184;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                     The present sequence is an inactive human CC (Cys-Cys) chemokino receptor 5 (CCR5), which is not a receptor of human immunodeficiency virus type 1 or type 2 (HIV-1 or HIV-2). CCR5 or its cDNA can used to dispnose, treat and/or prevent inflammatory diseases, e.g. rheumatoid arthritis, glomerulonephritis, asthma, idiopathic pulmonary fibrosis and psoriasis, viral infections, ospecially HIV-1 or HIV-2 infection, cancer, atheroscierosis and autoimmune disorders. Subjects that express the inactive receptor have a predisposition, or resistance to HIV-1 and/or HIV-2.
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        human immunodeficiency virus; type 1; type 2; HIV-1; HIV-2; diagnosis; treatment; prevention; inflammatory disease; rheumatoid arthritis; glomerulonephritis; asthma; idiopathic pulmonary fibrosis; psoriasis; viral infections.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Active and inactive forms of human CC che useful to diagnose, prevent and/or treat autoimmune disease and viral infection
                                                        Human Cys-Cys
                                                                                Human
                                                                                                                                                  AAW27407
                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence
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DB; AAT90116.
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                                                                                CCRS
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                                                                                                                                                standard;
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ilarity 100.0%;
Conservative
                                                                                                     (first
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                                                        chemokine receptor 5;
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96EP-0870021
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                                                                                                    entry)
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  autoimmune
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Pred. No. 4.4e-106;
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us; psoriasis; viral disorder.
                                                        CCR5;
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           infection;
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Best Local
                                                                                                                                                                                                                                                                                                                                                                                   chemokines, but not by monocyte chemoattractant protein 1 (MCP-1), MCP-2, MCP-3, interleukin-8 (IL-8) or growth related gene product alpha (GRO alpha) chemokines. Active CGR-5 is also a receptor of human immunodeficiency virus type 1 or type 2 (HIV-1 or HIV-2), CCR5 or its cDNA can used to diagnose, treat and/or prevent inflammatory diseases, e.g. rheumatoid arthritis, glomerulonephritis, asthma, idiopathic pulmonary fibrosis and psoriasis, viral infections, especially HIV-1 or HIV-2 infection,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Active
useful
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                                      Human chemokine receptor 88C
                                                           14-DEC-1997
                                                                                AAW27123
                                                                                                   AAW27123
                                                                                                                                                                                                                                                                                                                                                            Sequence
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            autoimmune disease
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01-MAR-1996;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                W09732019-A2
                                                                                                                                                                                                                                                                                                                                                                                cancer, atherosclerosis and autoimmune disorders
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (CCR5), which is
                                                                                                                                                     181
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                                                                                                                                                                                                                                                                                                                     184;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   and inactive to diagnose,
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                                                                                                   standard;
                                                                                                                                                                         HFPY 184
                                                                                                                                                                                                              LLTIDRYLAVVHAVFALKARTVTFGVVTSVITWVVAVFASLPGIIFTRSQKEGLHYTCSS
                                                                                                                                                                                           LLTIDRYLAVVHAVFALKARTVTFGVVTSVITWVVAVFASLPGIIFTRSQKEGLHYTCSS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  diagnose,
                                                                                                                                                                                                                                                                                                                                                            352 AA;
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                                                          (first
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96EP-0870021.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    94pp;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SA
                                                                                                  Protein;
                                                                                                                                                                                                                                                                                                                             85.4%;
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Pred. No.
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                                                                                                                                                                                                                                                                                                                   Indels
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180 180 120 120

Chemokine receptor 88C; atherosclerosis; rheumatoid arthritis; tumour; asthma; viral infection; AIDS; inflammation; autoimmune disease; therapy; diagnosis; leukocyte trafficking;

G

protein coupled

receptor; ligand; modulator; antibody;

human.

180

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Matches
                                                                                                                Query Mattch
Best Local :
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                                                                                                                                                                are potentially potentially useful in the treatment of atheroslerosis, rheumatoid arthritis, tumours, asthma, viral infection, AIDS, inflammatory conditions, pathological immune response, abnormal haematopoietic processes etc.
                                                                                                                                                                                                  domains, and anti-receptor antibodies can be used to modulate receptor activities, particularly ligand and G protein binding, are notentially motentially useful in the treatment of
                                                                                                                                                                                                                                                 88C, a G protein coupled receptor that is involved in leukocyte trafficking. Its amino sequence was deduced from a cDNA clone (AAT85161) isolated from a macrophage library. It shows 62% identity to CCCKR1. Chemokine receptor 88-28 (see AAM27124) has also been identified. 88C and 88-2B receptors and their polypeptide fragments
                                                                                                                                                                                                                                                                                                                                                                                                                                      Gray
                                                                                                                                                                                                                                 can be produced in transformed host cells. The receptors, peptides comprising one or more of the extracellular or intracellular
                                                                                                                                                                                                                                                                                                     This polypeptide sequence comprises novel 88C, a G protein coupled receptor that is
                                                                                                                                                                                                                                                                                                                                                     New nucleic acid encoding chemokine receptors 88-2B and 88C to modulate leukocyte trafficking, e.g. for treatment of inflammation, tumours, viral infections, autoimmune diseases,
                                                                                                                                                                                                                                                                                                                                      Claim
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20-DEC-1995;
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DB; AAT85161.
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                                                                                                      (184;
                61
                                      61
                                                    16; Page 47-48; 65pp; English.
                                                                                                                Similarity
          LKSMTDIYLLNLAISDLFFLLTVPFWAHYAAAQWDFGNTMCQLLTGLYFIGFFSGIFFII
                      LKSMTDIYLLNLAISDLFFLLTVPFWAHYAAAQWDFGNTMCOLLTGLYFIGFFSGIFFII 120
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                                                                                                                                                 352
                                                                                                    Conservative
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950S-0575967
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259..280
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89..112
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                                                                                                Score 958; DB 18;
Pred. No. 1e-105;
0; Mismatches 0;
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                                                                                                    0;
                                                                                                                       Length 352;
                                                                                                  Indels
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           120
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This protein sequence

comprises of a

novel

human macrophage-selective

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RESULT 6
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Claim 68; Fig 1C; 70pp; English
                                                          WPI; 1998-032650/03.
N-PSDB; AAT76920.
                                                                                                        Alkhatib
                                                                                                                                                    28-MAY-1996;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Key
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     transgenic animal.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CC chemokine receptor 5; CCR5; G-protein coupled receptor; human immunodeficiency virus; HIV; CD4; AIDS; therapy;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Human CC chemokine receptor 5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       08-JUN-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAW23835 standard; Protein;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAW23835;
                      chemokine receptor 5 polypeptide -
sion between HIV and a target cell
                                                                                             Υ,
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                                                                                         G, Berger :
Kennedy PE,
                                                                                                                              DEPT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (first entry)
                                                                                                                                                    96US-0018508
                                                                                                                                                                          97WO-US09586
                                                                                                                             HEALTH & HUMAN SERVICES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Location/Qualifiers 29..55
                                                                                                                                                                                                                                          /note= "transmembrane domain'
                                                                                                                                                                                                                                                         /label= VII
                                                                                                                                                                                                                                                                              /note=
                                                                                                                                                                                                                                                                                          261..276
                                                                                                                                                                                                                                                                                                  'note= "transmembrane
                                                                                                                                                                                                                                                                                                                           238..258
                                                                                                                                                                                                                                                                                                                                                                                   187..210
                                                                                                                                                                                                                                                                                                                                                                                                                   /note= "transmembrane
143..171
                                                                                                                                                                                                                                                                                                                                     note= "transmembrane
                                                                                                                                                                                                                                                                                                                                                             .94..219
                                                                                                                                                                                                                                                                                                                                                                       note=
                                                                                                                                                                                                                                                                                                                                                                                           'label= IV
'note= "transmembrane
                                                                                                                                                                                                                                                                                                                                                                                                                                                     104..126
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /label= I
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                                                                                                                                                                                                                                                                                                                                                 label=
                                                                                           EA, Broder CC,
, Murphy PM;
                                                                                                                                                                                                                                                                    ..300
                                                                                                                                                                                                                                                                                                                                                                     "extracellular loop-2 (Claim 19)"
                                                                                                                                                                                                                                                                             "extracellular loop-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                              "extracellular loop-1 (Claim 19)"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (CCR5).
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                                                                                                      Combadiere
                                 used to inhibit membrane
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      domain"
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                                                                                                                                                                                                                                                                             (Claim 19)"
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This invention describes a novel receptor polypeptide (I) selected from CC (1) a fully defined 339 amino acid sequence (II) fully disclosed in the Especification; and (i1) a polypeptide encoded by the cDNA contained in a CC plasmid, and fragments, analogs and derivatives of the polypeptide. The CC products of the invention have antiinflammatory, immunomodulatory, CC anticosquiant, antiallergic, immunosuppressive, vulnerary, cytostatic, CC antiparasitic, antipsoriatic, antirheumatic, antiarthritic and vasotropic contivity and can be used for gene therapy. The G-protein chemokine creceptors, HDGNR10, (I) are useful for screening for compounds which CC activate or inhibit activation of (I). The products of the invention can also be used for stimulating hammatopolesis, wound healing, coagulation, CC anglogenesis, treating solid tumours, chronic infections, leukemia, CC T-cell mediated autoimmune diseases, parasitic infections, psoriasis, and callergy, atherogenesis, and immunoglobulin a useful for treating coagulation, histamine and immunoglobulin E (IgE)-mediated allergic creations, prostaglandin-independent fever, bone marrow failure, CC silicosis, sarcoidosis, rheumatoid arthritis, shock and hunderceme
                                                                                                                                                                                                                               Query Match
Best Local S
Matches 184
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        06-JUN-1995;
18-NOV-1998;
25-JUN-1999;
                                                                                                                                                                                                                                                                                                 Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Claim la; Page 15;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               New human G-protein chemokine receptor polypeptides and polypucleotides, useful for identifying (ant)agonists to the G-protein chemokine receptor -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WPI; 2001-226317/23
N-PSDB; AAF26390.
                                                                                                                                                                                                                                                                                                                                                 hyper-eosinophilic syndrome. (N.B. This record was resubm
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      T-ccll mediated autoimmune disease; psoriasis; allergy; atherogenesis; anaphylaxis; malignancy; inflammation; histamine; IgE; silicosis; shock; immunoglobulin E-mediated allergic reaction; rheumatoid arthritis; prostaglandin-independent fever; bone marrow failure; sarcoidosis;
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(RUBE/) RUBEN S M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           29-NOV-2000; 2000US-0725285
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            hyper-eosinophilic
                                                                                                                                                                                                                                 Local Similarity
les 184; Conserv
181
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                                           LLTIDRYLAVVHAVFALKARTVTFGVVTSVITWVVAVFASLPGIIFTRSQKEGLHYTCSS 180
                                                                                         LLTIDRYLAVVHAVFALKARTYTFGVVTSVITWVVAVFASLPGIIFTRSQKEGLHYTCSS
                                                                                                                                                                                                                                                                                                352 AA;
                                                                                                                                                                                                                             85.4%; Silarity 100.0%; Conservative 0;
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98US-0195662.
99US-0339912.
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                                                                                                                                                                                                                                                                                                                                                 resubmitted
                                                                                                                                                                                                                                             Score 958; DB 22; Pred. No. 1e-105;
                                                                                                                                                                                                                               Mismatches
                                                                                                                                                                                                                                                                                                                                             to correct errors in the keyword
                                                                                                                                                                                                                                                           Length 352;
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HFPY 184

밁 181 HFPY 184

Search completed: June Job time : 40.4356 secs 40.4356 secs ω

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RESULT 14

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N-PSDB;
                                                                                                                                                                                                                                                                chemokine
CC-CKR-5;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   capable of modulating the interaction of chemotactic chemokine receptor 5 (CCR5) with gpl20, comprising incubating the agent with CCR5 and gpl20 and determining whether the agent modulates the interaction, where gpl20 is associated with CD4, and where the interaction is a low affinity binding. The method is used to identify an agent capable of modulating the interaction of CCR5 with gpl20. An agent identified by the method is used to prepare a pharmaceutical composition for the treatment of a disease or condition associated with CCR5 and gpl20 interaction, to treat a subject with a disease or condition associated with CCR5 and gpl20 reparts and gpl20 interaction.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       This sequence represents the human CCR5 protein sequence.
The invention relates to a method for determining whether an agrapable of modulating the interaction of chemotactic chemokine
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     interaction, and for preparing a pharmaceutical for treating human immunodeficiency virus (HIV). It can also be treat anti-inflammatory diseases. The method is commercially useful, amenable to high throughput screening, and detects interaction of gp120 with cells expressing only
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Claim 1; Page 110; 113pp;
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     20-MAY-1996;
                                                    21-MAY-1997;
                                                                                                                                                             US6258527-B1
                                                                                                                                                                                                                                                                                                                                                  Human;
                                                                                                                                                                                                                                                                                                                                                                                                 Human chemokine receptor (CKR), CC-CKR-5 related
                                                                                                                                                                                                                                                                                                                                                                                                                                                        04-SEP-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAE04321;
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                                                                                                        10-JUL-2001
                                                                                                                                                                                                                                                                                                                          human
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DB; AAF87099.
                                                                                                                                                                                                           sapiens
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                                                                                                                                                                                                                                                                ; transformed mammalian cell; CD4; reporter gene; translocation; limmuno deficiency virus; HIV; long terminal repeat; LTR; therap kine receptor; CKR; cellular dysfunction; HIV infection; cofacto R-5; envelope glycoprotein; anti-HIV.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         61
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                                                                                                                                                                                                                                                                                                                                                                                                                                                        (first entry)
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     96US-0017157
                                                    97US-0861105
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Protein;
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100.0%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 352
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Pred. No.
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the agent
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RESULT 15 AAB46858

AAB46858 standard; Protein;

352

AAB46858;

KWW XXXX DIT XXXX

Human HDGNR10 protein.

HDGNR10; human; G-protein chemokine receptor; antiinflammatory; inticoagulant; antiallergic; immunosuppressive; immunosuppressive; cytostatic; antiparasitic; vasotropic; gene therapy; haematopolesis; wound healing; coagulation; vasotropic; gene therapy; haematopolesis; wound healing; coagulation;

solid tumour;

infection;

factor

activity;

16-AUG-2001 02-AUG-2001 04-MAY-2001

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Best Local :
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                                                                                                                                                                                                                                                                                                                             the cell surface of transformed mammalian cell. The invention is useful for identifying drugs or antibodies that interfere with the translocation of HIV into transformed mammalian cell or for identifying a human chemokine receptor that facilitates the infection of a particular HIV strain into the transformed mammalian cell. Compounds identified can be used to treat cellular dysfunction and to prevent or combat HIV infection. The present sequence is a human chemokine receptor (CKR), CC-CKR-5 related protein. CC-CKR-5 is the principal cofactor for entry mediated by the envelope glycoproteins of primary macrophage-tropic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (AARO-)
(UYNY)
                                                                                                                                                                                                                                                                                                                                                                                                                                                            repeat (LTR) and that has been transduced with a vector encoding a human chemokine receptor (CKR) where the CD4 and the CKR are present
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Disclosure;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Transformed mammalian cell (I) and HIV LTR for identification
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Littman
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                                                                                                                                                                                                                                                                                                                  strains of
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       contains
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19-MAY-1997;
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                                                                                                                                                                                                                                             Similarity
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                                                                      LLTIDRYLAVVHAVFALKARTVTFGVVTSVITWVVAVFASLFGIIFTRSQKEGLHYTCSS
                                                                                                                              LKSMTDIYLLNLAISDLFFLLTVPFWAHYAAAQWDFGNTMCQLLTGLYFIGFFSGIFFII
                                                                                                                                                                                   MDYQVSSPIYDINYYTSBPCQKINYKQIAARLLPPLYSLYFIFGFVGNMLVILILINCKR
                            HFPY 184
                                                                                                               LKSMTDIYLLNLAISDLFFLLTVPFWAHYAAAQWDFGNTMCQLLTGLYFIGFFSGIFFII
                                                                                                                                                                      MDYQVSSPIYDINYYTSEPCQKINVKQIAARLLPPLYSLVFIFGFVGNMLVILILINCKR
                                                       LLTIDRYLAVVHAVFALKARTVTFGVVTSVITWVVAVFASLPGIIFTRSQKEGLHYTCSS
                                                                                                                                                                                                                                                                                                                  HIV-1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         gene
                                                                                                                                                                                                                                                                                     352 AA;
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                                                                                                                                                                                                                            85.4%; Score 958; ilarity 100.0%; Pred. No. Conservative 0; Mismatch
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97US-0858660.
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Sequence

352

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Query Match Best Local : Matches 18

184;

Conservative

<u>.</u>.

Mismatches

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0

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DB 22; 1e-105;

Length Indels

352;

Similarity

85.4%;

Score 958; Pred. No.

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RESULT 12
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            The invention relates to human G-protein chemokine receptor (CCRS) HDGNR10 polypeptides and polynucleotides. CCRS HDGNR10 antibodies are usoful for treating, preventing or ameliorating a disease or c
                                                                                                                                                                                                                               09-FEB-2000; 2000US-0181258.
09-MAR-2000; 2000US-0187999.
22-SEP-2000; 2000US-0234336.
                                                                                          Isolated nucleic acid encoding a human G-protein chemokine receptor (CCRS) HIGNRIO polypeptide, useful for preventing or treating autoimmune diseases e.g. rheumatoid arthritis, hyperproliferative
                                                                                                                                                                                                                                                                                                                                                                   human immunodeficiency virus; antimicrobial; vasodilator; vulnerary; cytostatic; immunosuppressive; nootropic; neuroprotective; gene therapy; nourodegonerative disorder; Kaposi's sarcoma; autoimmune disease; rhoumatoid arthritis; cancer; breast; ovary; adrenal gland; bone marrow; gastrointestinal tract; lung; liver; immune disorder; Addison's disease; multiple aclerosis; ulcerative colitis; Crohn's disease; wound healing; cardiovascular disorder; myocardial ischaemia.
                                                                                                                                                                                     Rosen CA,
                                                                                                                                                                                                                                                                            09-FEB-2001; 2001WO-US04153
                                                                                                                                                                                                                                                                                                         16-AUG-2001
                                                                                                                                                                                                          (HUMA-) HUMAN GENOME
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)B; AAD13299.
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                                                                                      neurodegenerative
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                                                             504-505; 518pp;
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enting or ameliorating a disease or disorder defective or aberrant chemotaxis of immune
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                                                                                   disorders
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            disorder
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CC cells, HIV infection (such as Pneumocystis carinii pneumonia or Kaposi's CC sarcoma) or defective or aberrant T-cell antigen presenting cell CC interaction. The disease or disorder may also be an infectious disease CC (e.g. a viral infection, such as an early stage HIV infection, a CC disease (e.g. rheumatoid arthritis) or a neurodegenerative disorder. The CC disease or disorder may be associated with aberrant CCR5 expression, lack CC function. CCR5 HDGNR10 protein is used as a food additive or preservative CC function. CCR5 HDGNR10 protein is used as a food additive or preservative CC for chromosome identification and in gene therapy. CCR5 HDGNR10 DNA, CCR5 disposis, treatment and prevention of cancer (breast, ovary, adrenal CCC disposis, treatment and prevention of cancer (breast, ovary, adrenal CCC urogenital); immune disorders (addison's disease, allergies, autoimmune CCC disease, multiple sclerosis, rheumatoid arthritis and ulcerative colitis); cardiovascular disorders (myocardial ischaemias) and ccc vound healing. The present sequence is human CCR5 HDGNR10 protein.
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Best Local
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12-JAN-2000;
12-JAN-2000;
                             (PFIZ )
(PFIZ )
                                                                                                                  03-JAN-2001;
                                                                                                                                                                                                         Chemotactic chemokine receptor 5; gp120; CD4; therapy; HIV; CCR5; human immunodeficiency virus; anti-inflammatory disease; human.
                                                                                                                                                                   EP1118858-A2
                                                                                                                                                                                                                                                  Human CCR5 protein sequence
                                                                                                                                                                                           Homo sapiens.
                                                                                                                                                                                                                                                                                09-OCT-2001
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      Perros M,
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                                                                 ; 2000GB-0000659.
; 2000GB-0000661.
; 2000GB-0000663.
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     Rickett GA;
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Pred. No. le-105;
0; Mismatches 0;
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181 HFPY

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amino acids 2-18 in the N-terminal region of CCR5 comprise an HIV-1 CC gpl2D-binding site that determines the specificity of the CC interaction between CCR5 and HIV-1 gpl2D. Post-translational CC sulfation of the tyrosine residues in the CCR5 N-terminus is CC susceptibility of target cells to HIV-1 infection in vivo. The CC susceptibility of target cells to HIV-1 infection in vivo. The CC are based on the CCR5 N-terminal region and which are effective CC are based on the CCR5 N-terminal region and which are effective CC alimed methods of inhibiting HIV infection of CD4+ cells, of preventing CD4+ cells from becoming infected with HIV, of treating CCR5 receptor. The methods may be carried out in a subject whose CD4+ cells are infected with HIV, and of CCR5 receptor. The methods may be carried out in a subject, which inhibits binding of a CCR5 ligand to a CCR5 receptor. The methods may be carried out in a subject, which HIV (prophylactic method), or in a subject who is not infected with, but has been exposed to, HIV.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Claim 1; Page 30; 163pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Novel compounds comprising specific amino acids within CCR5 (HIV 1 co-receptor) amino terminal domain including negatively charged an sulfated tyrosine residues is useful for treating HIV infection in
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                                                                                                                                   MDYQVSSPIYDINYYTSEPCQKINVKQIAARLLPPLYSLVFIFGFVGNMLVILILINCKR
                                                                                                                                                MDYQVSSPIYDINYYTSEPCQKINVKQIAARLLPPLYSLVFIFGFVGNMLVILILINCKR
                        HFPY 184
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; 2000US-205839P.
; 2001US-267231P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     sequence is that of human HIV-1 co-receptor CCR5. 2-18 in the N-terminal region of CCR5 communication of CCR5.
                                                                                                                                                                                       Conservative
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; therapy; vaccine;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /note= "binds to HIV-1 gpl20"
                                                                                                                                                                                                                  85.4%;
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anti-HIV-1.
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AAE07039
ID AATC
AAE07039 standard; Protein; 352 AA
                                                                                                                                                                                 Human G-protein chemokine receptor (CCR5) HDGNR10 protein
                                                                                                                                                                                       16-OCT-2001
                                                                                                                                                                           Human;
                                                                                                                                                                                             AAE07039
                                                                                                                                                                           G-protein
                                                                                                                                                                                       (first entry)
                                                                                                                                                                           chemokine receptor; CCR5; HDGNR10; inflammation;
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rheumatoid arthritis; cancer; breast; ovary; adrenal gland; bone marrow; gastrointestinal tract; lung; liver; immune disorder; Addison's disease; haemolytic anaemia; autoimmune thyroiditis; diabetes mellitus; allergy; multiple sclerosis; ulcerative colitis; Crohn's disease; wound healing; cardiovascular disorder; myocardial ischaemia. human immunodeficiency virus; antimicrobial; vasodilator; vulnerary; cytostatic; immunosuppressive; nootropic; neuroprotective; gene ther neurodegenerative disorder; Kaposi's sarcoma; autoimmune disease; gene therapy;

09-FEB-2000; 09-MAR-2000; 09-FEB-2001; 16-AUG-2001 WPI; 2001-488965/53. N-PSDB; AAD13198. Rosen CA, (HUMA-) HUMAN GENOME SCI INC Roschke V, ; 2000US-0181258. ; 2000US-0187999. ; 2000US-0234336. 2001WO-US04152 匚 ۲, Ruben X

WO200158915-A2 Homo sapiens.

Isolated nucleic acid encoding a human G-protein chemokine receptor (CCR5) HDGNR10 polypeptide, useful for preventing or treating autoimmune diseases e.g. rheumatoid arthritis, hyperproliferative disorders and neurodegenerative

Example 40; Page 486-487; 495pp; English

The present sequence is human G-protein chemokine receptor (CCR5) HDGNR10 CC protein. CCR5 HDGNR10 antibodies are useful for treating, preventing CC ameliorating a disease or disorder associated with inflammation, CC defective or aberrant chemotaxis of immune cells, HIV infection (such as C pneumocystis carinii pneumonia or Kaposi's sarcoma) or defective or CC aberrant T-cell antigen presenting cell interaction. The disease or CC as an early stage HIV infection, a cytomegalovirus infection such CC as an early stage HIV infection, a cytomegalovirus infection, or a cytomegalovirus infection, an autoimmune disease (e.g. a viral infection such CC an early stage HIV infection, a cytomegalovirus infection, or a cytomegalovirus infection, aberrant CCR5 cytomegalovirus infection, or lack of CCR5 HJGNR10 protein is used as a food additive or preservative to increase or decrease cytomegalovirus and and in gene therapy. CCR5 HJGNR10 DNA, protein, cytomegalovirus and antigeneration of cancer (breast, ovary, adrenal cytomegalovirus and antigeneration of cancer (breast, ovary, adrenal gland, bone, bone marrow, gastrointestinal tract, liver, lung, crohn's disease, multiple sclerosis, rheumatoid arthritis and ulcerative cytomics, cardiovascular disorders (myocardial ischaemias) and

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      Chemokine; tumour diagnosis; colorectal; prostatic; organ rejection; inflammation; autoimmune disease; metastasis; bronchial asthma; lupus; chronic bowel inflammation; rheumatoid arthritis; cytostatic; antilifiammatory; antiasthmatic; immunosuppressive; dermatological;
     antirheumatic; antiarthritic
                                                                      Human CCR5
                                                                                          17-JAN-2002
                                                                                                                             AAG80111 standard; Protein; 352 AA
                                                                                                                                                                                                                                                                                                                                                                                                              The invention relates to G protein-coupled receptors (GPCRs) for whithe endogenous ligand has been identified. Non-endogenous constitutively activated versions of known GPCRs are used in the invention for the direct identification of candidate compounds as receptor agonists, inverse agonists or partial agonists. Such agonists are useful as therapeutic agents for diseases or disorders associated with GPCRs. The present sequence is a non-endogenous version of a known human GPCR.
                                                                                                                                                                                                                                                                                                                                                                                                    Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Claim 1; Page 277-278;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Versions
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Identifying agonists of G prodiscase treatment, comprises
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (AREN-)
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DB; ABI97978.
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                                                                                                                                                                                                                                                                                                       ARENA PHARM
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                                                                    protein
                                                                                                                                                                                                                                                                                                                                                                                                  352 AA;
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                                                                                       (first
                                                                                     entry)
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100.0%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              394pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           protein-coupled receptors (GPCRs) for protein-coupled receptors (GPCRs) for proteins with
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                                                                                                                                                                                                                                                                                                                                                               Score 958; DB 22;
Pred. No. 1e-105;
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Query Match
Best Local :
                                                            or prostatic), organ rejection, inflammation and autoimmune diseases. Also inhibitors of (1) are used therapeutically against tumors (and their inflammation), or autoimmune diseases (rheunation) are autoimmune diseases (rheunatoid arthritis or lupus), endocrine, motor or urogenital systems or skin are affected, and bone which have cytostatic, antiinflammatory, antiasthmatic, constellation of chemokine derivatives immunosuppressive, dermatological, antirheunatic, antiarthritic. Constellation of chemokine receptors (CR), which control migration and proliferation of these cells. AAG80045-AAG80128 represent human chemokine fragments used to illustrate the method of the invention.
                                                 Sequence
                                                                                                                                                                                                                                                                This invention describes a novel diagnostic agent (A) comprising two different ligands (I) for receptors (II) that are implicated
                                                                                                                                                                                                                                                   two different ligands (I) for receptors (II) that are implicated in disease. (A) are used for the diagnosis of tumors (especially colorectal
                                                                                                                                                                                                                                                                                                                                             Diagnostic agent containing two or more receptor-specific ligands, useful for detecting tumors, inflammation etc., also therapeutic use ligand inhibitors
                                                                                                                                                                                                                                                                                                                        Disclosure; Page 10;
                                                                                                                                                                                                                                                                                                                                                                                                                WPI;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (IPFP-) IPF PHARM GMBH (FORS/) FORSSMANN U.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             31-MAR-2000; 2000DE-1016013
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Pred. No.
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RESULT 10
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                                                                                        HFPY
                                      standard;
                                                                                  HFPY
                                                                                                                                         MDYQVSSPIYDINYYTSEPCQKINVKQIAARLLPPLYSLVFIFGFVGNMLVILILINCKR
co-receptor CCR5
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            (first entry)
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                                     Protein;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CC chemokine receptor that has been designated CCR5. The sequence was deduced from an isolated cDNA clone (see AAT76920). An Ala171/eu variant (see W238340 of CCR5 was also identified. The susceptibility of human macrophages to HIV infection depends on cell surface expression of CDA and CCR5. CCR5 is a member of the 7-transmembrane capperfamily of G-protein coupled cell surface molecules. It plays an essential role in the membrane fusion step of infection by some CRIV isolates. The establishment of stable, non-human cell lines and transgenic mammals having cells that coexpress human CD4 and CCR5 provides valuable tools for research of HIV infection. CRS provides valuable tools for research of HIV infection. CRS capable of blocking membrane fusion between HIV and target cells represent potential anti-HIV therapeutics for macrophage
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                                                                                                                                                                                                                                                                            HIV-1 co-receptor CCR5
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Similarity 100.0%;
84; Conservative (
                                                                                                                                                                                                                                                          CCR5; CCR5m303; co-receptor;
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67..87
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                                 /note=
275..30
                                                                                                                    103..124
                                                                                                                             /note= "corresponds to TGT (Cys) in wild-type CCR5
                                                      236...260
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Pred. No.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  03-DEC-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                This is the amino acid sequence of wild-type human CCR5, which serves as a co-receptor for infection by macrophage-tropic (M-tropic) strains of HIV-1. The invention relates to the identification of a CCR5 variant (see AAW88231), designated CCR5m303, comprising the first two transmembrane domains of wild-type CCR5, but lacking transmembrane domains 3.7. The presence of the but lacking transmembrane domains 3.7. The presence of the composition of the second composition of the compositi
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N-PSDB; AAV84126.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Disclosure; Page 34-35;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence
Human; G protein-coupled receptor; GPCR; non-endogenous;
constitutively activated GPCR; agonist; disease.
                                                                                Non-endogenous human GPCR protein,
                                                                                                                                       18-FEB-2002
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                                                                                                                                                                                                                                                 ABB56342 standard;
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                                                                                            SEQ ID NO: 477.
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# Copyright GenCore version 5.1.6 (c) 1993 - 2003 Compugen Ltd.

OM protein protein search, using sw model

Run on: June 3, 2003, 15:16:36 ; Search time 19.7178 Seconds (without alignments) 1048.235 Million cell updates/sec

Title: Perfect score: US-09-939-226-6 1122

MDYQVSSPIYDINYYTSEPC..

.AACHGHLLLGNPKNSASVSK 215

Scoring table: BLOSUM62 Gapop 10.0 , Gapext 0.5

Scarched: 283224 segs, 96134422 residues

Total number of hits satisfying chosen parameters: 283224

Minimum DB Maximum DB

seq length: 0
scq length: 2000000000

Post-processing: Minimum Match 0% Maximum Match 100 Listing first 45

**summaries** 

Database : PIR\_73:\* p1r1:\* p1r2:\* p1r3:\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

### SUMMARIES

Result

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157940 JQ1231	A47249 JN0605	JN0763 A48921	I65989 I57955	JE0349 JN0694	JN0621	S44425	A48857	JH0621
interleuxin-6 rece	brain-specific som somatostatin recep	somatostatin recep interleukin-8 rece	G protein-coupled somatostatin recep	interferon-inducib angiotensin II rec	G protein-coupled	angiotensin II rec	angiotensin II rec	

### ALIGNMENTS

Nature 382, 722-725, 1996	M.; Ima1, T.; Rana, S.; Y1, Y.; Smyth, R.J.; Collman, R.G.; Doms, R.W.; Vassart, G.;	R; Samson, M.; Libert, F.; Doranz, B.J.; Rucker, J.; Liesnard, C.; Farber, C.M.; Sarag	A; Cross-references: GB: X91492; NID: g1262810; PIDN: CAA62796.1; PID: g1262811	A; Residues: 1-352 <sam1></sam1>	A; Molecule type: mRNA	A; Accession: A43113	A;Reference number: A43113; MUID:96241590; PMID:8639485	A; Title: Molecular cloning and functional expression of a new human CC-chemokine rece	Biochemistry 35, 3362-3367, 1996	R; Samson, M.; Labbe, O.; Mollereau, C.; Vassart, G.; Parmentier, M.	C; Accession: A43113; S71808; A58834; A58832; G02653; A58833	C;Date: 12-Jul-1996 #sequence_revision 12-Jul-1996 #text_change 20-Jun-2000	C; Species: Homo sapiens (man)	N; Alternate names: C-C CKR-5; CCR5	chemokine (C-C) receptor 5 - human	.A43113	RESULT 1
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A;Title: Resistance to HIV-1 infection in caucasian individuals bearing mutant allele A;Reference number: S71808; MUID:96345670; PMID:8751444

A; Reference number: A; Accession: S71808 Status: nucleic acid sequence not shown; not compared with conceptual translation

A; Molecule type: DNA A; Residues: 182-206; 207-230 <SAM2> A; Accession: A58834

Status: nucleic acid sequence not shown; not compared with conceptual translation

A; Molecule type: DNA
A; Residues: 1-184, 'IKDSHLGAGPAAACHGHLLLGNPKNSASVSK' <SAM3>
A; Residues: 1-184, 'IKDSHLGAGPAAACHGHLLLGNPKNSASVSK' <SAM3>
A; Rocsidues: GB: X99393; NID: g1524062; PIDN: CAA67767.1; PID: g1524063
A; Note: this frameshift mutation results in a non-functional receptor but confers nd may have had a selective advantage by conferring resistance to Yersinia plague
R; Combadiere, C.; Auja, S.K.; Tiffany, H.L.; Murphy, P.M.

inf

Leukoc. Biol. 60, 147-152, 1996
 A;Title: Cloning and functional expression of CC CKR5, a human monocyte CC chemokine A; Reference number: A58832; MUID:96295970; PMID:8699119
 A; Accession: A58832

A; Molecule type: mRNA
A; Residues: 1-352 <COM1>
A; Residues: 1-352 <COM1>
A; Cross-references: GB:U57840; NID:g1502408; PIDN:AAB17071.1; PID:g1502409
A; Experimental source: clone 8, endotoxin-stimulated peripheral blood monocytes

R;Combadiere, C.
submitted to the EMBL Data Library, May 1996
A;Reference number: H01541
A;Accession: G02653 A; Status: translated from GB/EMBL/DDBJ

A; Molecule type: mRNA
A; Molecule type: mRNA
A; Molecule type: mRNA
A; Molecule type: mRNA
A; Residues: 1-89, 'L', 91-352 <COM2>
A; Cross-references: EMBL:U57840
A; Cross-references: EMBL:U57840
R; Raport, C.J.; Gosling, J.; Schweickart, V.L.; Gray, P.W.; Charo, I.F.
J. Biol. Chem. 271, 17161-17166, 1996
J. Biol. Chem. 271, 17161-17166, 1996
J. Biol. Chem. 271, 17161-17166, 1996
A; Title: Molecular cloning and functional characterization of a novel human CC chemok
A; Reference number: A58833; MUID:96291862; PMID:8663314

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A;Accession: A58833
A;Accession: A58833
A;Kolecule type: mRNA
A;Residues: 1-352 <RAP>
A;Cross-references: GB:U54994; NID:g1457945; PIDN:AAC50598.1; PID:g1457946
A;Cross-references: GB:U54994; NID:g1457945; PIDN:AAC50598.1; PID:g1457946
C;Comment: This is a receptor for chemokines MIP-lalpha (see PIR:A30574), MIP
                                                                                                                                                                                                                                                                                                                                                                                                                                      C; Date: :
C; Access:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  N;Alternate names: C-C CKR-2; monocyte cC;Species: Homo ganion- (R-2)
                                                                                                                                        A;Cross-references: DDBJ:D29984; NID:g531246; PIDN:BAA06253.1; PID:g531247 R;Charo, I.F.; Myers, S.J.; Herman, A.; Franci, C.; Connolly, A.J.; Coughl Proc. Natl. Acad. Sci. U.S.A. 91, 2752-2756, 1994
A;Title: Molecular cloning and functional expression of two monocyte chemo. A;Reference number: A53477; MUID:94195821; PMID:8146186
                                                                                                                                                                                                                                                               R;Yamagami, S.; Tokuda, Y.; Ishii, K.; Tanaka, H.; Endo, N. Biochem. Biophys. Res. Commun. 202, 1156-1162, 1994
A;Title: CDNA cloning and functional expression of a human monocyte A;Reference number: JC2443; MUID:94324942; PMID:8048929
A;Accession: JC2443
A;Molecule type: mRNA
A;Residues: 1-360 <YAM>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               F;103-124/Domain: transmembrane #status predicted <TM3> F;142-166/Domain: transmembrane #status predicted <TM4> F;142-18/Domain: transmembrane #status predicted <TM5> F;133-218/Domain: transmembrane #status predicted <TM5> F;236-257/Domain: transmembrane #status predicted <TM6> F;285-300/Domain: transmembrane #status predicted <TM7> F;20-269,101-178/Disulfide bonds: #status predicted
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  A;Map position: 3p21-3p21
C;Function:
A;Description: G protein-coupled receptor for chemokines MIP-lalpha, MIP-lbeta
A;Note: probably acts to control granulocyte proliferation and differentiation
C;Superfamily: vertebrate rhodopsin
  A;Cross-references:
C;Genetics:
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F;32-56/Domain: transmembrane #status predicted <TM1>
F;67-87/Domain: transmembrane #status predicted <TM2>
                                                                       A; Molecule type: mRNA
                                                                                           A; Status: preliminary
                                                                                                                       A; Accession: I38463
                                                    A;Residues: 1-360 <RES>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          A; Cross-references:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  A; Gene: GDB: CMKBR5; CCR5; CKR-5;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
Best Local S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               268/Binding site: carbohydrate (Asn) (covalent) #status predicted 336,337,342/Binding site: phosphate (Ser) (covalent) #status predicted 340,343/Binding site: phosphate (Thr) (covalent) #status predicted
                                                                                                                                                                                                                                                                                                                                                                                                                                      Accession:
                                                                                                                                                                                                                                                                                                                                                                                                                                      21-Feb-1995 #sequence_revision 05-Apr-1995 ion: JC2443; I38463
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   181
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     184;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          61 LKSMTDIYLLNLAISDLFFLLTVPFWAHYAAAQWDFGNTMCQLLTGLYFIGFFSGIFFII 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1 MDYQVSSPIYDINYYTSEPCQKINVKQIAARLLPPLYSLVFIFGFVGNMLVILILINCKR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LLTIDRYLAVVHAVFALKARTVTFGVVTSVITWVVAVFASLPGIIFTRSQKEGLHYTCSS 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           MDYQVSSPIYDINYYTSEPCQKINVKQIAARLLPPLYSLVFIFGFVGNMLVILILINCKR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Conservative
                           EMBL: U03905;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GDB:1230510;
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100.0%;
                           NID:g472557; PIDN:AAA19120.1;
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OMIM:601373
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 958;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           chemoattractant protein 1 receptor;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               . В
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 human
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                                                                                                                                                                                                                                                                                                                                                                                                                                                         #text_change
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                      PID: g472558
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                                                                                                                                                                                                                Coughlin,
                                                                                                                                                                                                                                                                                                                                                              chemoattractant
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N;Alternate names: C-C CKR-2; monocyte chemo C;Species: Homo sapiens (man)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                A; Map position: 3p21-3p21
c; Superfamily: vertebrate rhodopsin
c; Superfamily: vertebrate splicing; G protein-coupled rec
c; Keywords: alternative splicing; G protein-coupled rec
c; 43-70/Domain: transmembrane #status predicted <TM1>
c; 43-70/Domain: transmembrane #status predicted <TM2>
c; 81-100/Domain: transmembrane #status predicted <TM2>
                                                                                                   F;292-309/Domain: transmembrane *status predicted <TM7> F;14/Binding site: carbohydrate (Asn) (covalent) *status F;32-277,113-190/Disulfide bonds: *status predicted
                                                                                                                                                                                                      F;115-136/Domain: transmembrane #status predicted <TM3>F;154-178/Domain: transmembrane #status predicted <TM4>F;208-226/Domain: transmembrane #status predicted <TM5>
                                                                                                                                                                                                                                                                                                                                 C; Superfamily: vertebrate rhodopsin C; Keywords: alternative splicing; G
                                                                                                                                                                                                                                                                                                                                                                               A; Cross-references: GDB:337364; OMIM:601267
A; Map position: 3p21-3p21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 R;Charo, I.F.; Myers, S.J.; Herman, A.; Franci, C.; Connolly, A.J.; Coughlin, Proc. Natl. Acad. Sci. U.S.A. 91, 2752-2756, 1994
A;Title: Molecular cloning and functional expression of two monocyte chemoattraperence number: A53477; MUID:94195821; PMID:8146186
A;Accession: I38450
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A;Cross-references
                                                                                                                                                                                                                                                                                  F;44-68/Domain: transmembrane #status predicted F;79-99/Domain: transmembrane #status predicted
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          A; Molecule type: mRNA
A; Residues: 1-374 < RES>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              C; Accession: I38450
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                                                                                                                                                                              F; 244-265/Domain: transmembrane #status predicted <TM6>
                                                                                                                                                                                                                                                                                                                                                                                                                                      A; Gene: GDB: CMKBR2
                                                                                                                                                                                                                                                                                                                                                                                                                                                           C; Genetics:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                A;Cross-references: EMBL:U03882; NID:g472555; PIDN:AAA19119.1; PID:g472556
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            A; Status: preliminary
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       Matches
                            Query Match
Best Local :
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Species: Homo sapiens (man)
Date: 16-Feb-1996 #sequence_revision
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 130 VVHAVFALKARTVTFGVVTSVITWVVAVFASLPGIIFTRSQKEGLHYTCSSHFP 183
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          82
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                                                                                                                                                                                                                                                                                                            alternative splicing; G protein-coupled receptor;
ain: transmembrane #status predicted <TM1>
                            Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Similarity
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     Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Conservative
                            61.9%;
75.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  61.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             17;
Score 694; DB 2;
Pred. No. 2.5e-56;
7; Mismatches 23;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Score 694; DB 2; 1
Pred. No. 2.4e-56;
7; Mismatches 23;
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us predicted <TM1>
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  chemoattractant protein 1 receptor; monocyte
                                                                                                                                                                                                                                                                                       ^TM2>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     #text_change
                                                 Length 374;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length 360;
                                                                                                                             predicted
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     monocyte chemoattractant
                                                                                                                                                                                                                                                                                                                                 glycoprotein;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       glycoprotein; transmemb
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     Gaps
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LNLAISDLEFLLTVPFWAHYAAAQWDFGNTMCQLLTGLYFIGFFSGIFFIILLTIDRYLA 129

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N; Alternate names: C-C CKR-1; macrophage inflammatory protein-1-aipnu recept (;Species: Homo sapiens (man) (;Species: Homo sapiens (man) (;Data: 30-Sep-1993 *sequence_revision 30-Sep-1993 *text_change 13-Aug-1999 C;Acccssion: A45177; I55671 R;Neoto, K; Digregorio, D.; Mak, J.Y.; Horuk, R.; Schall, T.J.
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F:147-171/Domain: transmembrane #status predicted <TM4>
F:205-223/Domain: transmembrane #status predicted <TM5>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            C;Superfamily: vertebrate rhodopsin
C;Koywords: disulfide bond; G protein-coupled receptor;
F;36-60/Domain: transmembrane #status predicted <TM1>
F;71-91/Domain: transmembrane #status predicted <TM2>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    A:Gene: GDB:CMKBR1; CMKR-1
A:Cross-references: GDB:138446; OMIM:601159
A:Map position: 3p21-3p21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        A;Title: Molecular cloning, A;Reference number: A45177, A;Accession: A45177
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
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A;Molocule type: mRNA
A;Rcsiducs: 1-355 <RES>
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      A;Cross-references: GB:L10918; NID:g292416; PIDN:AAA36543.1; A;Experimental source: HL60 cells
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    A; Molecule type: mRNA
A; Residues: 1-355 <NEO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     chemokine
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                J. Exp. Med. 177, 1421-1427, 1993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         R;Cao, J
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               A; Note:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   A; Status: nucleic acid sequence not shown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      240-264/Domain: transmembrane #status predicted <TM6>;288-305/Domain: transmembrane #status predicted <TM7>;288-305/Domain: transmembrane #status predicted <TM7>;5/Binding site: carbohydrate (Asn) (covalent) #status predicted;24-273,106-183/Disulfide bonds: #status predicted
                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
Best Local :
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Genetics:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               345/Binding site: phosphate (Ser) (covalent) (by casein kinase II)
                                                                                                                                                                                                                                                                                                                                                                                       Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             sequence extracted from NCBI backbone (NCBIP:124876)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   K.; DiGregorio, D.; Mak, J.Y.; Horuk, R.;
415-425, 1993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (C-C) receptor 1 - human
186
                                             181
                                                                                             126
                                                                                                                                             121
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                                                                                                                                                                                                                                                                                HFPY 184
                                                                                                                                        LLTIDRYLAVVHAVFALKARTVTFGVVTSVITWVVAVFASLPGIIFTRSQKEGLHYTCSS
                                                                                                                                                                                       KNWTSIYLLNLAISDLLFLFTLPFWIDYKLKDDWVFGDAMCKILSGFYYTGLYSEIFFII
                                                                                                                                                                                                              KSMTDIYLLNLAISDLFFLLTVPFWAHYAAA-QWDFGNTMCQLLTGLYFIGFFSGIFFII 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    LLTIDRYLAIVHAVFALRARTVTFGVITSIIIWALAILASMPGLYFSKTQWEFTHHTCSL
                                                                                                                                                                                                                                                                                                                                                                                    Conservative
189
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       C-C CKR-1; macrophage inflammatory protein-1-alpha receptor
                                                                                                                                                                                                                                                                                                                                                                                  53.3%; Score 598; DB 2; I
59.2%; Pred. No. 1.6e-47;
tive 34; Mismatches 37;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 functional expression, and signaling characteristics of a MUID:93161416; PMID:7679328
                                                                                                                                                                                                                                                                                                                                                                                                                               Length 355;
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                                                                                          . 185
                                                                                                                                                                                                                                                                                     65
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A;Title: Molecular cloning and functional expression of a novel CC chemokine re A;Reference number: A57160; MUID:95370289; PMID:7642634
A;Accession: A57160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             A; Molecule type: mRNA
A; Residues: 1-360 < POW>
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chemokine (C-C) receptor 4 - human
N;Alternate names: C-C CKR-4
C;Species: Homo sapiens (man)
C;Date: 10-Nov-1995 #sequence_revision 10-Nov-1995 #text_change 21-Jul-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             R;Gao, J.L.; Murphy, P.M.
J. Biol. Chem. 270, 17494-17501, 1995
A;Title: Cloning and differential tissue-specific expression A;Reference number: 149339; MUID:95340546; PMID:7542241
A;Accession: 149339
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           macrophage inflammatory protein-1 alpha receptor - mouse
C:Species: Mus musculus (house mouse)
C:Date: 02-Jul-1996 #sequence_revision 02-Jul-1996 #text_change 13-Aug-1999
C:Accession: I49339
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            A; Molecule type: DNA
A; Residues: 1-355 < RES>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                              Matches 107;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Status: preliminary; translated from GB/EMBL/DDBJ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Local Similarity
                                                                                                                                                                                        135
                                                                                                                                                                                                                                                                                               71 NLAISDLFEILITVPFWAHYAAA-QWDFGNTMCQLLTGLYFIGFFSGIFFIILLTIDRYLA 129
                                                                                                                                                                                                                                                                                                                                                                   15
                                                                                                                                                                                                                                                                                                                                                                                                          11 DINYYTSEPCQKINYKQIAARLLPPLYSLVFIFGFVGNMLVILILINCKRLKSWTDIYLL
                                                                                                                                                                                 IVHAVEALRARTVTLGIITSIITWALAILASMPALYEFKAQWEETHRTCSPHFPY
                                                                                                                                                                                                                           VVHAVFALKARTVTFGVVTSVITWVVAVFASLPGIIFTRSQKEGLHYTCSSHFPY 184
                                                                                                                                                                                                                                                                                                                                                                EFDYGDSTPCQKTAVRAFGAGLLPPLYSLVFIIGVVGNVLVILVLMQHRRLQSMTSIYLF 74
                                                                                                                                                                                                                                                                        NLAVSDLVFLFTLPFWIDYKLKDDWIFGDAMCKLLSGFYYLGLYSEIFFIILLTIDRYLA
                                                                                                                                                                                                                                                                                                                                                                                                                                                           Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 51.1%;
61.1%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                           27;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Score 573.5;
Pred. No. 2.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                              .9e-45;
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                                                                                                                                                                                                                                                                          134
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F;243-364/Domain: transmembrane #status predicted <TM6>
F;291-308/Domain: transmembrane #status predicted <TM7>
F;291-308/Domain: transmembrane #status predicted <TM7>
F;29-276,110-187/Disulfide bonds: #status predicted
F;22-276,110-187/Disulfide bonds: #status predicted
F;23-350/Binding site: phosphate (Ser) (covalent) (by casein kinase C) #status predicte
F;145/Binding site: phosphate (Ser) (covalent) (by protein kinase C) #status predicted
F;183/194/Binding site: carbohydrate (Asn) (covalent) #status predicted A; Map position: 3p21-3p21
C; Superfamily: vertebrate rhodopsin
C; Superfamily: vertebrate rhodopsin
C; Keywords: G protein-coupled receptor; glycoprotein; ph
F; 40-65/Domain: transmembrane #status predicted <TM1>
F; 76-97/Domain: transmembrane #status predicted <TM2>
F; 112-133/Domain: transmembrane #status predicted <TM3>
F; 1208-226/Domain: transmembrane #status predicted <TM4>
F; 208-226/Domain: transmembrane #status predicted <TM4>
F; 208-226/Domain: transmembrane #status predicted <TM5> A; Cross-references: GDB:677463 A; Gene: GDB: CMKBR4 A; Cross-references: GB: X85740; NID: g1370103; PIDN: CAA59743.1; PID: g971452 A; Note: source clone K5-5 Query Match Best Local Similarity Matches 100; Conserv /Binding site: phosphate (Thr) (covalent) (by protein kinase C) Conservative 48.8%; 36; Pred. No. Score 547.5; Mismatches 7.1e-43; DB 2; phosphoprotein; transmembrane Length Indels 360; 5 Gaps #status

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predicto

A; Status: preliminary; not compared

with conceptual translation

chemokine receptor

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C;Generics
A;Gene: cc ckr-4
A;Gene: cc ckr-4
C;Superfamily: vertebrate rhodopsin
C;Keywords: glycoprotein; phosphoprotein; receptor; thymus
F;2,183,194/Binding site: carbohydrate (Asn) (covalent) #status predicted
F;2,202,350/Binding site: phosphate (Ser) (covalent) (by casein kinase C;
F;145/Binding site: phosphate (Ser) (covalent) (by protein kinase C) #sta-221/Rinding site: phosphate (Thr) (covalent) (by protein kinase C) #sta-221/Rinding site: phosphate (Thr) (covalent) (by protein kinase C) #sta
                                                    A; Reference number: A; Accession: I49341
                                                                                    R;Gao, J.L.; Murphy, P.M.
J. Biol. Chem. 270, 17494-17501, 1995
A;Title: Cloning and differential tis
                                                                                                                                                                                                              RESULT
149341
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             A:Title: Molecular cloning of murine CC CKR-4 and high A:Reference number: JC4587; MUID:96136324; PMID:8573157 A;Accession: JC4587 A;Molecule type: mRNA A;Residues: 1-360 <HOO> A;Cross-references: EMBL:X90862; NID:g1167851; PIDN:CAAA;Experimental source: thymus C;Genetics:
A; Molecule t
A; Residues:
                                A; Status: preliminary; translated
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(;Species: Mus musculus (house mouse)
C;Date: 08-Mar-1996 #sequence_revision 19-Apr-1996 #text
C;Accession: JC4587
R;Hoogewerf, A.J.; Black, D.; Proudfoot, A.E.I.; Wells,
Blochem. Blophys. Res. Commun. 218, 337-343, 1996
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                                                                                                                                                      ;Species: Mus musculus (house mouse);Date: 02-Jul-1996 #sequence_revision
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Date: 08-Mar-1996 #sequence_revision 19-Apr-1996 #text_change
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 type: DNA : 1-359 <RI
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                                                                                                                                                                                        receptor like-2 - mouse
                                                                                                                                                                                                                                                                                                                                                                                                                                                    9 IYDINYY---TSEPCQKINVKQIAARLLPPLYSLVFIFGFVGNMLVILILINCKRLKSMT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         99;
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                                                                                                                                           I49341
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                                                                                                                                                                                                                                                                                                                                                                                                                   VYNSYYFYESMPKPCTKEGIKAFGEVFLPPLYSLVFLLGLFGNSVVVLVLFKYKRLKSMT
                                                                                                                                                                                                                                                                                                             RYLAVVHAVFALKARTVTFGVVTSVITWVVAVFASLPGIIFTRSQKEGLHYTCSSHF 182
                                                                                                                                                                                                                                                                           RYLAIVHAVESLKARTLTYGVITSLITWSVAVFASLPGLLFSTCYTEHNHTYCKTQY
                                                                                                                                                                                                                                                                                                                                               DVYLLNLAISDLLEVLSLPFWGYYAADQWVFGLGLCKIVSWMYLVGFYSGIFFIMLMSID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CKTKY 191
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CSSHF 182
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FVMLMSIDRYLAIVHAVFSLRARTLTYGVITSLATWSVAVFASLPGFLFSTCYTERNHTY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FIILLTIDRYLAVVHAVFALKARTVTFGVVTSVITWVVAVFASLPGIIFTRSQKEGLHYT 177
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 YKRLRSMTDVYLLNLAISDLLEVFSLPFWGYYAADQWVFGLGLCKMISWMYLVGFYSGIF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CKRLKSMTDIYLLNLAISDLFFLLTVPFWAHYAAAQWDFGNTMCQLLTGLYFIGFFSGIF
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Conservative
                                                                    149339;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      48.7%; 55.9%;
                                                                    ential tissue-specific expression MUID:95340546; PMID:7542241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         36;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NID:g1167851; PIDN:CAA62372.1; PID:g1167852
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Score 546.5; DB 2
Pred. No. 8.8e-43;
                                   from
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Mismatches
                                  GB/EMBL/DDBJ
                                                                                                                                                        02-Jul-1996
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       39;
                                                                                                                                                      #text_change
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                                                                                    of
                                                                                    three mouse
                                                                                                                                                        02-Jul-1998
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C;Species: H
C;Date: 21-D
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                                                                                                                                                                                                                                                                           F;240-261/Domain: transmembrane #status
                                                                                                                                                                                                                                                                                                                                                                            C; Keywords: G protein-coupled
                                                                                                                                                                                                                                                                                                                                                                                                                A; Map position:
                                                                                                                                                                                                                                                                                                                                                                                                                                   A; Cross-references:
                                                                                                                                                                                                                                                                                                                                                                                                                                                  A; Gene: GDB: CMKBR3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                C; Accession: G02436;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             A;Residues:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ;Species: Homo sapiens (man);Date: 21-Dec-1996 #sequence_revision;Accession: G02436; A57237
                                                                                                                                                                     Query Match
Best Local (
                                                                                                                                                                                                                       345/Binding site:
                                                                                                                                                        Matches
                                                                                                                                                                                                                                                                                         147-171/Domain: transmembrane #status 205-223/Domain: transmembrane #status
                                                                                                                                                                                                                                                                                                                                                                                                 Superfamily: vertebrate rhodopsin
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Best Local
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57.68;
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57.9%;
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                                                                                                                                                    32;
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A; Notecute type: mRNA
A; Molecule type: mRNA
A; Residues: 1-106,'N',108-275,'S',277-280,'R',282-355 <COM>
A; Cross-references: GB:U28694; NID:g1199579; PIDN:AAC50469.1; PID:g1199580
A:Note: the translated sequence in GenBank entry HSU28694, release 113.0, I
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                A;Cross-references: EMBL:U49727; NID:g1477560; PIDN:AAB
R;Combadiere, C.; Ahuja, S.K.; Murphy, P.M.
J: Biol. Chem. 270, 16491-16494, 1995
A;Title: Cloning and functional expression of a human ed
A;Reference number: A57237; MUID:95348056; PMID:7622448
A;Accession: A57237
                                                                                                                                                                                                                                                                                                                                                                                                      C; Keywords: G protein-coupled receptor; glycopro F;36-60/Domain: transmembrane #status predicted F;71-91/Domain: transmembrane #status predicted
                                                                                                                                                                                                                                                                                                                                                                               F;108-129/Domain: transmembrane #status predicted <TM3>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     A; Cross-references: EMBL: U28406; NID: g881551; C; Superfamily: vertebrate rhodopsin
                                                                                                                                                                                                                                                                         288-305/Domain: transmembrane #status predicted <TM7> 24-273,106-183/Disulfide bonds: #status predicted
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Status: nucleic acid sequence not shown
                                                                                          20 CQKINVKQIAARLLPPLYSLVFIFGFVGNMLVILILINCKRLKSMTDIYLLNLAISDLFF
LLTVPFWAHYAAA-QWDFGNTMCQLLTGLYFIGFFSGIFFIILLTIDRYLAVVHAVFALK: 138
                                                                   CEKADTRALMAQFVPPLYSLVFTVGLLGNVVVVMILIKYRRLRIMTNIYLLNLAISDLLF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AVFALRARTVTFATITSIITWGLAGLAALPEFIFHESQDSFGEFSCSPRYP
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 YYTSEPCQKINVKQIAARLLPPLYSLVFIFGFVGNMLVILILINCKRLKSMTDIYLLNLA
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       OMIM: 601268
                                                                                                                                                      Score 506.5; DB 2;
Pred. No. 4.2e-39;
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                                                                                                                                                                                                                                                (covalent) (by
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s predicted <TM5>
s predicted <TM6>
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RESULT 11

$55594

$57594

SPOTCEIN-coupled receptor E1 - equine herpesvirus 2

C;Species: equine herpesvirus 2

C;Date: 10-Apr-1996 #sequence_revision 19-Apr-1996 #text_change 13-Aug-1999

C;Accession: $55594
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J. Biol. Chem. 270, 17494-17501, 1995
A;Title: Cloning and differential tissue-specific expression A;Reference number: 149339; MUID:95340546; PMID:7542241
A;Accession: 149340
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   MIP-1 alpha receptor like-1 - mouse
C;Species: Mus musculus (house mouse)
C;Date: 02-Jul-1996 #sequence_revision 02-Jul-1996 #text_change 13-Aug-1999
C;Accession: 149340
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                                                                                                                                                                                                                                                                                                                                                                       R:Telford, E.A.R.; Watson, M.S.; Aird, H.C.; Perry, J.; Mol. Biol. 249, 520-528, 1995
A;Title: The DNA sequence of equine herpesvirus 2.
A;Reforence numbor: S55594; MUID:95302501; PMID:7783207
A;Accession: S55594
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C; Superfamily: vertebrate rhodopsin
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A; Residues: 1-356 < RES>
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Matches
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                                                                                                                                                                                                Local
                                                                                                                                                                                                                                                                                                                                                    preliminary; nucleic acid sequence
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  LRNMTSIYLENLAISDLVFLSTLPFWVDYIMKGDWIFGNAMCKFVSGFYYLGLYSDMFFI
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                  NLAISDLLFLLTLPFWMHYIGMYHDWTFGISLCKLLRGVCYMSLYSQVFCIILLTVDRYL
                                                                                               DVDYEESAPCYKSDTTRLAAQVVPALYLLVFLFGLLGNILVVIIVIRYMKIKNLTNMLLL
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                                                                                                                                                                       40.0%; Score 449; DB 2;
48.6%; Pred. No. 8.7e-34;
tive 37; Mismatches 51
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                                                                                                                                                                                                                                                                                                                                                        not shown
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 $ C; Genetics:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 C;Accession: JC5067; G02776; G02387
R;Zaballos, A.; Varona, R.; Gutlerrez, J.; Lind, P.; Marquez, G.
Blochem. Blophys. Res. Commun. 227, 846-853, 1996
A;Title: Molecular cloning and RNA expression of two new human chemokine receptor-lik
A;Reference number: JC5067; MUID:97040707; PMID:8886020
A;Accession: JC5067
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               G protein-coupled receptor CKR-L1 - human
NAILternate names: chemokine receptor-like protein TER1; GPR-CY6
C;Species: Homo sapiens (man)
C;Date: 31-Jan-1997 #sequence_revision 31-Jan-1997 #text_change 21-Ju1-2000
C;Recession: JC5067; G02776; G02387
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 JC5067
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     A;Gene: GDB:CMKBR8; CMKBRL2; TER1; CKR-L1
A;Cross-references: GDB:6053733; OMIM:601834
A;Map position: 3p21-3p21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               A;Cross-references: EMBL:045983; NID:91245056; PID:91245057
C;Comment: This protein belongs to the family of beta chemokine receptors
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           A; Molecule type: DNA
A; Residues: 1-355 <BON>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 submitted to the EMBL Data Library, January 1996 A; Reference number: H01154 A; Accession: G02387
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               A;Cross-references: EMBL:279782; NID:91668735; R;Napolitano, M.; Zingoni, A.; Bernardini, G.; submitted to the EMBL Data Library, June 1996
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F;239-260/Domain:
F;281-304/Domain:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                A; Map position: 3p21-3p21
C; Superfamily: vertebrate rhodopsin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            A; Status: preliminary; translated from GB/EMBL/DDBJ
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A; Accession: G02776
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RESULT 13
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              C; Keywords: G protein-coupled receptor; transmembrane protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            R; Bonner,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             A;Cross-references: EMBL:U62556; NID:g1468978; PID:g1468979
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A; Residues: 1-355 <NAP>
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A; Residues: 1-355 <ZAB>
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                                                                                                                                                                                                                                                                                                                                  MDYQVSSPIYDI-NYY----TSEPCQKINVKQIAARLLPPLYSLVFIFGFVGNMLVILIL
                                                       LQCYSFY
                                                                                                                                                                       IFFIILLTIDRYLAVVHAVFALKARTVTFGVVTSVITWVVAVFASLPGIIFTRSQKEGLH 175
                                                                                                                                                                                                              VVCKKLRSITDVYLLNLALSDLLFVFSFPFQTYYLLDQWVFGTVMCKVVSGFYYIGFYSS
                                                                                                                                                                                                                                                                                             MDYTLDLSVTTVTDYYYPDIFSSPCDAELIQTNGKLLLAVFYCLLEVFSLLGNSLVILVL
                                                                                                                                  MFFITLMSVDRYLAVVHAVYALKVRTIRMGTTLCLAVWLTAIMATIPLLVFYQVASEDGV
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transmembrane #status predicted <TM4>
transmembrane #status predicted <TM5>
transmembrane #status predicted <TM6>
                                                       187
                                                                                                                                                                                                                                                                                                                                                                                       38.1%;
42.8%;
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                                                                                                                                                                                                                                                                                                                                                                           40;
                                                                                                                                                                                                                                                                                                                                                                         Score 427.5;
Pred. No. 7.6e
10; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                     predicted
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Spinetti, G.; Rocchi, M.; San
                                                                                                                                                                                                                                                                                                                                                                                                              DB 2;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         <TM2>
                                                                                                                                                                                                                                                                                                                                                                           62;
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A;Cross-references: EMBL:U04808; NID:g2558635; PIDN:AAB87093.1; C;Superfamily: vertebrate rhodopsin C;Keywords: G protein-coupled receptor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     probable G protein-coupled receptor - rat C; Species: Rattus norverious
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Neurosci. Lett. 169, 85-89, 1994
A;Title: cDNA cloning of a G-protein-coupled receptor expressed
A;Reference number: 158186; MUID:94323113; PMID:8047298
A;Accession: 158186
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              C; Accession: I581
R; Harrison, J.K.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  C;Species: Rattus norvegicus (Norway rat)
C;Date: 26-Jul_1996 #sequence_revision 26-Jul-1996 #text_change 21-Jul-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         A; Molecule type: mRNA
A; Residues: 1-354 <RES>
                                                                                                                                                                                                                                                                                                                                                                                                                 R;Fan, P.; Kyaw, H.; Su, K.; Zeng, Z.; Augustus, M.; Carter, K.C.; Li, Y. Biochem. Biophys. Res. Commun. 243, 264-268, 1998
A;Title: Cloning and characterization of a novel human chemokine receptor A;Reference number: JC5942; MUID:98139902; PMID:9473515
A;Accession: JC5942
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                                                                                                                                                                                                                                                                                                                     A;Cross-references: GB:U97123; NID:g2897070; PIDN:AAC39595.1; PID:g2897071 C;Superfamily: vertebrate rhodopsin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  C;Species: Homo sapiens (man)
C;Date: 16-Jul-1999 #sequence_revision 16-Jul-1999 #text_change 21-Jul-2000
C;Accession: JC5942
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A; Residues: 1-344 <FAN>
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               122 LTIDRYLAVVHAVFALKARTVTFGVVTSVITWVVAVFASLPGIIFTRSQKEGLHYTCSSH 181
  139
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                                   136 ALKARTVTFGVVTSVITWVVAVFASLPGIIFTRSQKEGLHYTCS-SHFPYI 185
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SFPELDLENFEYDDSAEACYLGDIVAFGTIFLSIFYSLVFTFGLVGNLLVVLALTNSRKS
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                                                                                                                                                                                                                                                            Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ISIDRYLAIVLAANSMNNRTVQHGVTISLGVWAAAILVASPQFMFTKRKDN----ECLGD 179
                                                                                                                                                           LFELLTVPFWAHYAAAQWDFGNTMCQLLTGLYFIGFESGIFETILLTIDRYLAVVH-AVF 135
                                                                                                                                                                                             SEPCOKINVKQIAARLLPPLYSLVFIFGFVGNMLVILILINCKRLKSMTDIYLLNLAISD 76
FSARRRVPCGIITSVLAWVTAILATLPEYVVYKPOMEDQKYKCAFSRTPFL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ; Barber, C.M.; Lynch, K.R.
169, 85-89, 1994
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Pred. No. 5e-28;
                                                                                                                                                                                                                                                              Score 378; DB 2; Length 344; Pred. No. 2.6e-27;
                                                                                  -GDPMCKILIGLYFVGLYSETFFNCLLTVQRYLVFLHKGNF
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        189
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forphan G protein-coupled receptor - human
N;Alternate names: V28 protein
C;Species: Homo sapiens (man)
C;Date: 16-Nov-1995 #sequence_revision 08-Feb-1996 #text_change 19-May-2000
                                                                                                                                                                                                                                                                                                                     C;Superianily.
C;Keywords: G protein-coupled receptor.
C;Keywords: G protein-coupled receptor.
F;35-57/Domain: transmembrane #status predicted <TM1>
F;35-57/Domain: transmembrane #status predicted <TM2>
F;104-125/Domain: transmembrane #status predicted <TM4>
F;146-165/Domain: transmembrane #status predicted <TM5>
F;197-217/Domain: transmembrane #status predicted <TM5>
F;197-217/Domain: transmembrane #status predicted <TM5>
F;197-217/Domain: transmembrane #status predicted <TM5>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           R;Raport, C.J.; Schweickart, V.L.; Eddy Jr., R.L.; Shows Gene 163, 295-299, The orphan G-protein-coupled receptor-encoding A;Reference number: JC4304; MUID:96011651; PMID:7590284
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   A; Map position: 3pter-p21
C; Superfamily: vertebrate rhodopsin
C; Keywords: G protein-coupled receptor; lymphokine;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  A;Cross-references: GB:U20350; NID:g665580; PIDN:AAA91783.1; PID:g665581
A;Experimental source: peripheral blood mononuclear cell
C;Comment: This protein is a cell-surface receptor which recognizes extracellular sig
C;Comment: This protein is a key regulator of many immune and homeostatic responses,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  JC4304
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A; Residues: 1-355 < RAP>
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                                                                                                                                                                                                                                   Query Match
Best Local :
                                                                                                                                                                                                                                                                                                                  275-296/Domain: transmembrane #status predicted
                                                                                                                                                                                                             Matches
                                                                                                        18
                                                                                                                                                       17 SEPCOKINVKQIAARLLPPLYSLVFIFGFVGNMLVILILINCKRLKSMTDIYLLNLAISD
  78
                                                  77
                                                                                                                                                                                                                                      h 32.5%;
Similarity 43.2%;
                                                                                                        LEFLLTVPEWAHYAAAQWDFGNTMCQLLTGLYFIGFFSGIFFIILLTIDRYLAVVHAVFA 136
LLEVATLPEWTHYLINEKGLHNAMCKETTAFFFIGFFGSIFFITVISIDRYLAIVLAANS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Schweickart, V.L.; Eddy Jr., R.L.; Shows, T.B.; Gray, P.W.
                                                                                                                                                                                                                Conservative
                                                                                                                                                                                                                                            Score 365; DB 2;
Pred. No. 4.3e-26;
                                                                                                                                                                                                                     Mismatches
                                                                                                                                                                                                                                                                        DB 2;
                                                                                                                                                                                                                        64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 transmembrane
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Search completed: June 3, 2003, 15:22:40 Job time: 19.7178 secs

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138

RESULT 15

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GenCore version 5.1.6 Copyright (c) 1993 - 2003 Compugen Ltd.
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OM protein - protein search, using sw model

Run on: June 3, 2003, 15:09:40; Search time 9.85891 Seconds (without alignments) 904.503 Million cell updates/sec

Title: Perfect score: Sequence:

US-09-939-226-6 1122 1 MDYQVSSPIYDINYYTSEPC.....AACHGHLLLGNPKNSASVSK 215

Scoring table:

BLOSUM62 Gapop 10.0 , Gapext 0.5

Searched: 112892 seqs, 41476328 residues

Total number of hits satisfying chosen parameters: 112892

Minimum DB seq length: 0
Maximum DB seq length: 200000000

Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries

Databasc : SwissProt\_40:\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

## SUMMARIES

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427.5	15.0	499.5	499.0	506.5	516.5	535.5	535.5	546.5	547.5	562	570.5	598	688	694	714.5	715.5	775	786	916	928	933	933	936	938	938	938	938	942	947	952	958		Score	
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homo sapien				homo sapien	cavia porce	rattus norv	mus musculu	mus musculu	homo sapien	macaca mula	mus musculu	homo sapien	macaca mula	homo sapien	rattus norv	mus musculu	rattus norv	mus musculu	cercopithec	cercocebus	papio hamad	macaca mula	hylobates 1	trachypithe	trachypithe	pygathrix n	pygathrix b	gorilla gor	ч.	pan troglod	homo sapien		otion	

RL.

J. Virol. 71:8642-8656(1997).

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330.5	331.5	331.5	334.5	342.5	345.5	363	365	370	383	386	424
29.5	29.5	29.5	29.8	30.5	30.8	32.4	32.5	33.0	34.1	34.4	37.8
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000590	P79394	P30991	062747	P47774	P32248	P51686	P49238	Q9wut7	6p0z60	P35411	097665
homo sapien		homo sapier	cercocebus	mus musculu	homo sapien	homo sapica	homo sapien	mus musculu	mus musculu	rattue	macaca mula

## ALIGNMENTS

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Raport C.J., Gosling J., Schweichart V.L., Gray P.W., Charo I.F.;  *Molecular cloning and functional characterization of a novel human CC chemokine receptor (CCR5) for RANTES, MIP-1beta, and MIP-1alpha.*;  J. Biol. Chem. 271:17161-17166(1996).  SEQUENCE FROM N.A.  MEDLINE-96295970; PubMed-8699119; Combadiere C., Ahuja S.K., Tiffany H.L., Murphy P.M.;  "Cloning and functional expression of CC CKR5, a human monocyte CC chemokine receptor selective for MIP-1(alpha), MIP-1(beta), and RANTES.*;  "Leukoc. Biol. 60:147-152(1996).  [4]  SEQUENCE FROM N.A.  MCCOmbie W.R., Wilson R., Chen E., Gibbs R., Zuo L., Johnson D., Nhan M., Parnell L., Dedhia N., Ansari A., Mardis E., Schutz R., Nhan M., Parnell L., Evans C., Fitzgerald M., See L.H., Tang M., Morocel B.M., Dragan Y., Giacalone J., Pae A., Powell E., Solinsky K.A., Desilva U., Diaz-Perez S., Zhou X., Yu Y., Watanabe M., Doggett N.; Garcia D., Sagripanti J.L.; Submitted (MAY-1997) to the EMBL/GenBank/DDBJ databases.  SEQUENCE FROM N.A.  MEDLINE-99001387; PubMed-9343222;	SEQUENCE FROM N.A.  MEDLINE-96241590; PubMed-8639485;  Samson M., Labbe O., Mollereau C., Vassart G., Parmentier M.;  "Molecular cloning and functional expression of a new human CC-chemokine receptor gene.";  Biochemistry 35:3362-3367(1996).  [2]  SEQUENCE FROM N.A.	1996 (Rel 1996 (Rel 2002 (Rel 2002 (Rel mokine re fusion cr (CMKBR5. piens (Hu piens (Hu piens (Hu piens (Hu piens (Hu piens (Hu	RESULT 1.  CKR5_HUMAN  CKR5_HUMAN  STANDARD;  PRT;  352 AA.  PRT;  352 AA.  PRT;  352 AA.  O14692; O14693; O14695; O14696; O14697; O14698; O14699;  AC.  O14700; O14701; O14702; O14703; O14704; O14705; O14706; O14707;  AC.  O14708; O15538; O9UPA4:

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Zhang L.
Ho D.D.;
"HIV type
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Lagic T., Litwin V., Allaway G.P., Magashima K.A., Cayanan C., M.
'HIV-1 entry'
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[7]
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SEQUENCE FROM N.A., AND POLYMORPHISMS.
MEDLINE-98022612; PubMed-9359654;
%hand L., Carruthers.C.D., He T., Huat
                    EMBL;
EMBL;
                                                                                                                                                                                                                                                                                                                                                                   "HIV-1 entry into CD4+ cells CC-CKR-5.";
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                                                                                modified and this
                                                                                                                                                                                                                                                                                               Farzan M., Mirzabekov T., Kolchinsky P., Wyatt R., Cayabyab M., Gerard N.P., Gerard C., Sodroski J., Choe H., "Tyrosine sulfation of the amino terminus of CCR5 facilitates HIV-1
                                                                                                                                                                                                                                                                                                                                                  Nature 381:667-673(1996).
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Debre P.;
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                                                                                                                                                                      MIP-1-BETA AND RANTES AND SUBSEQUENTLY TRANSDUCES A SIGNAL BY INCREASING THE INTRACELLULAR CALCIUM IONS LEVEL, MAY PLAY A ROLE IN THE CONTROL OF GRANULOCYTIC LINEAGE PROLIFERATION OR DIFFERENTIATION, ACTS AS CO-RECEPTOR WITH CD4 FOR PRIMARY NON-SYNCYTIUM-INDUCING STRAINS (NSI) (MACROPHAGE-TROPIC) OF HIV-1 VIRUS. IT PROMOTES ENV-MEDIATED FUSION OF THE VIRUS. SUBCELLULAR LOCATION: Integral membrane protein. TISSUE SPECIFICITY: FOUND IN PROMYELOCYTIC CELLS.

PTM: SULFATION CONTRIBUTES TO THE EFFICIENCY OF HIV-1 ENTRY.
                                                                                                                                          PTM: MODIFIED BY O-LINKED GLYCOSYLATION, GLYCOSYLATION.
SIMILARITY: BELONGS TO FAMILY 1 OF G-PRO
                                                                                                   European Bioinformatics Institute.
                                                                                                                                                                                                                                                                   FUNCTION: RECEPTOR FOR A C-C TYPE CHEMOKINE.
                                                                                                              SWISS-PROT entry is copyright. It is produced through a collaboration -
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 U54994;
U57840;
U95626;
U83326;
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                                         X91492;
                                                           an
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                                                                                          non-profit institutions as long
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                                                             email to
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CAA62796.1;
AAC50598.1;
AAB17071.1;
AAB57793.1;
AAC51797.1;
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                                                                                                                                           BELONGS TO FAMILY 1 OF G-PROTEIN COUPLED RECEPTORS.
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a license
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NOT BY N-LINKED
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Y-> D (IN INCCR5-71A).

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A-> S (IN DBSNP: 1800939).
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                                                                                                                                                                                                                                                                                                                               Edinger A.L., Amedee A., Miller K., Doranz B.J., Endre Sharron M., Samson M., Lu Z.H., Clements J.E., Murphey Pelper S.C., Parmentler M., Broder C.C., Donas R.W.; "Differential utilization of CCR5 by macrophage and T simian immunodeficiency virus strains."; Proc. Natl. Acad. Sci. U.S.A. 94:4005-4010(1997).
                                                                                                                                                                                                                                                                                                                                                                                                                                    Pan troglodytes (Chimpanzee).
Eukaryota; Metazoa; Chordata;
Mammalla; Euthorla; Primates;
NCBI_TaxID=9598;
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                                                                                     SEQUENCE FROM N.A.
MEDLINE-98090115; Pubmed-9430250;
                                                                                                                                      Zacharova V., Zachar V., Goustin A.S. "Sequence of chemokine receptor gene HIV type 1 host.";
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          Protet J.-L., Zerblb A., Girard M., Guillet J.-G., Butor C.
"Chimpanzee CXCR4 and CCR5 act as correceptors for HIV type
AIDS Res. Hum. Retroviruses 13:1583-1587(1997).
-1- FUNCTION: RECEPTOR FOR A C-C TYPE CHEMOKINE. BINDS TO M
MIP-1-BETA AND RANTES AND SUBSEQUENTLY TRANSDUCES A SIG
INCREASING THE INTRACELULIAR CALCIUM IONS LEVEL. MAY PER
IN THE CONTROL OF GRANULOCYTIC LINEAGE PROLIFERATION OR
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                                                                                                                                                                                                                                            Zhang
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                                                                                                                           Retroviruses 13:1159-1161(1997).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      STANDARD;
                                                                                                                                                                                                                                        PubMed=9359654;
ers C.D., He T.,
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                                 BINDS TO MIP-1-ALPHA,
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RESULT 3
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CONFLICT
SEQUENCE
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PROSITE; PS50262; G_PROTEIN_RECEP_F1_2;
G-protein coupled receptor; Transmembra
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EMBL; U89797; AAC03717.1; -.
InterPro; IPR000276; GPCR_Rhodpsn.
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U94329; AAB58446.1; -
AF011542; AAB65742.1;
U97666; AAC51670.1; -
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HFPY
                                                           LLTIDRYLAVVHAVFALKARTVTFGVVTSVITWVVAVFASLPGIIFTRSQKEGLHYTCSS
                                                                                              MDYQVSSPIYDINYYTSEPCQKINVKQIAARLLPPLYSLVFIFGFVGNMLVILILINCKR
                                              LLTIDRYLAIVHAVFALKARTVTFGVVTSVITWVVAVFASLPGIIFTRSQKEGLHYTCSS
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1 30 EXTRACELLULAR (POTENTIAL).

58 1 (POTENTIAL).

59 68 CYTOPLASMIC (POTENTIAL).

59 102 EXTRACELLULAR (POTENTIAL).

50 102 EXTRACELLULAR (POTENTIAL).

50 124 3 (POTENTIAL).

51 124 CYTOPLASMIC (POTENTIAL).

52 141 CYTOPLASMIC (POTENTIAL).

53 128 EXTRACELLULAR (POTENTIAL).

54 19 EXTRACELLULAR (POTENTIAL).

55 19 6 (POTENTIAL).

56 260 6 (POTENTIAL).

51 277 EXTRACELLULAR (POTENTIAL).

51 277 EXTRACELLULAR (POTENTIAL).

51 277 EXTRACELLULAR (POTENTIAL).

52 352 CYTOPLASMIC (POTENTIAL).

53 301 CYTOPLASMIC (POTENTIAL).

54 301 SULFATION (BY SIMILARITY).

55 15 SULFATION (BY SIMILARITY).

56 268 N-LINKED (GLCNAC. . .) (POTENTIAL).

57 -> S (IN REF. 1).
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98.9%;
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TO FAMILY 1 OF G-PROTEIN COUPLED RECEPTORS
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                                                                                                                                                                                                          Score 952;
Pred. No. 5.
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                                                                                                                                                                                                Mismatches
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5.4e-53;
hes 0;
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CKR5\_PONPY 097881; 30-MAY-2000

(Rel. 39, Created)

STANDARD;

PRT;

352

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Mammalia; Eutheria; Primates;
NCBI_TaxID=9600;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
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"Sequence evolution of the CCR5 chemokine receptor gene in primates.";
MOI. Biol. Evol. 16:1145-1154(199).
"I- FUNCTION: RECEPTOR FOR A C-C TYPE CHEMOKINE. BINDS TO MIP-1-ALPHA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CCR5 OR CMKBR5
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European Bioinformatics Institute.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FUNCTION: RECEPTOR FOR A C-C TYPE CHEMOKINE. BINDS MIP-1-BETA AND RANTES AND SUBSEQUENTLY TRANSDUCES INCREASING THE INTRACELLULAR CALCIUM 10NS LEVEL. IN THE CONTROL OF GRANULOCYTIC LINEAGE PROLIFERATI
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59 68
69 90 102
103 124
1103 124
115 116
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119 235
11 236 260
261 277
278 301
302 352
101 178
LLTIDRYLAVVHAVFALKARTVTEGVVTSVITWVVAVFASLPGIIFTRSQKEGLHYTCSS
                                                                                                                                                        PS50262;
                                                                                          LKSMTDIYLLNLAISDLEFLLTVPFWAHYAAAQWDEGNTMCQLLTGLYFIGEESGIEFII
                                                                   LKSMTDIYLLNLAISDLFFLLTVPFWAHYAAAQWDFGNTMCQLLTGLYFIGFFSGIFFII
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G_PROTEIN_RECEP_F1_2; 1.
receptor; Transmembrane;
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98.4%;
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r type 5 (C-C CKR-5) (CC-CKR-5) (CCR-5).
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TO FAMILY 1 OF G-PROTEIN COUPLED RECEPTORS
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                                                                                                                                                                                                                                                Score 947; DE Pred. No. 1.1e 2; Mismatches
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CYTOPLASMIC (
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2 (POTENTIA)
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                                                                                                                                                                                                                                                                                                                                                                                                                the European Bioinformatics Institute. The use by non-profit institutions as long modified and this statement is not removed. entities requires a license agreement (See or send an email to license@isb-sib.ch).
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Sharron M., Samson
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Eukaryota; Metazoa; Chordata; Craniata; Vo
Mammalia; Eutheria; Primates; Catarrhini;
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Sharron M., Samson M., Lu Z.H., Clements J.
Peiper S.C., Parmentier M., Broder C.C., Do
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15-JUL-1998 (Rel. 36,
16-OCT-2001 (Rel. 40,
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PROSITE; PS50262; G_PROTEIN_RECEP_F1_2;
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SIMILARITY: BELONGS TO FAMILY 1 OF G-PROTEIN COUPLED RECEPTORS
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Last annotation
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N_RECEP_F1_2; 1.
; Transmembrane;
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Gorilla.
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Best Local Similarity
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Pfam; PF00001; 7tm_1; 1.
PRINTS; PR00237; GPCRHODOPSN.
PROSITE; PS00237; G_PROTEIN_RECEP_
PROSITE; PS50262; G_PROTEIN_RECEP_
                                                                                                                                                                           This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                         Pygathrix bieti (Black snub-nosed monkey) (Rhinopithecus bieti).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Cercopithecidae; Colobi
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                                                                                                                                                        EMBL; AF075445; AAD19857.1;
                                                                                                                                                                                                                                                                                                                                                                                               SEQUENCE FROM N.A.
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                                                                                                                                                                                                                                                                 DIFFERENTIATION.
SUBCELLULAR LOCATION: Integral membrane protein.
SIMILARITY: BELONGS TO FAMILY 1 OF G-PROTEIN COUPLED RECEPTORS.
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G_PROTEIN_RECEP_F1_2; 1.
G_PROTEIN_RECEP_F1_2; 1.
receptor; Transmembrane; Glycoprotein;
30 EXTRACELLULAR (POTENTIAL).
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or type 5 (C-C CKR
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                   CYTOPLASMIC (POTENTIAL).
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EXTRACELLULAR (POTENTIAL)
3 (POTENTIAL).
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Matches 177; Conser
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MEDLINE-99416438; PubMed=10486970;
Zhang Y.-W., Ryder O.A., Zhang Y.-P.;
Zhang Y.-W., Ryder O.A., Zhang Y.-P.;
Sequence evolution of the CCR5 chemokine receptor gene in primates.'
Mol. Biol. Evol. 16:1145-1154(1999).
-I- FUNCTION: RECEPTOR FOR A C-C TYPE CHEMOKINE. BINDS TO MIP-1-ALPHI-
MIP-1-BETA AND RANTES AND SUBSEQUENTLY TRANSDUCES A SIGNAL BY
INCREASING THE INTRACELLULAR CALCIUM IONS LEVEL. MAY PLAY A ROLE
IN THE CONTROL OF GRANULOCYTIC LINEAGE PROLIFERATION OR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             30-MAY-2000 (Rel: 39, Created)
30+MAY-2000 (Rel: 39, Last sequence update)
15-JUN-2002 (Rel: 41, Last annotation update)
C-C chemokine receptor type 5 (C-C CKR-5) (CC-CKR-5) (CCR-5) (CCR5).
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097882;
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NCBI_TaxID=54133;
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Mammalia; Eutheria; Primates; Catarrhini; Cercopithecidae; Colobinae;
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                                                                                                                                                                                                                                     DIFFERENTIATION.
SUBCELLULAR LOCATION: Integral membrane protein.
SIMILARITY: BELONGS TO FAMILY 1 OF G-PROTEIN COUPLED RECEPTORS
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Pred. No. 4e-52;
6; Mismatches
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collaboration

outstation

119

.ch/announce/

AF075448; AAD19860.1; Pro; IPR000276; GPCR\_R

G-protein DOMAIN PROSITE;

coupled receptor;

Transmembrane;

ransmembrane; Glycoprotein; EXTRACELLULAR (POTENTIAL).

Sulfation

TRANSMEM

Pfam; PF PRINTS;

PF00001; 7t S; PR00237;

7tm\_1; 1. 7; GPCRRHODOPSN

PS00237; G\_PROTEIN\_RECEP\_F1\_1; PS50262; G\_PROTEIN\_RECEP\_F1\_2;

RECEPTORS.

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RESULT 7
CKR5_TRAFR
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TRANSMEM
       SEQUENCE FROM N.A.

SEQUENCE FROM N.A.

MEDILINE-99416438; PubMed=10486970;
Zhang Y.-W., Ryder O.A., Zhang Y.-P.;
Zhang Y.-W., Ryder O.A., Zhang Y.-P.;
"Sequence evolution of the CCR5 chemokine receptor gene in primates."

MOI. Biol. Evol. 16:1145-1154(1999).

-1- FUNCTION: RECEPTOR FOR A C-C TYPE CHEMOKINE. BINDS TO MIP-1-ALPHA

MIP-1-BETA AND RANTES AND SUBSEQUENTLY TRANSDUCES A SIGNAL BY
INCREASING THE INTRACELLULAR CALCIUM IONS LEVEL. MAY PLAY A ROLE
IN THE CONTROL OF GRANULOCYTIC LINEAGE PROLIFERATION OR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DOMAIN
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Mammalia; Eutheria;
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39, Last sequence update)
41, Last annotation update)
septor type 5 (C-C CKR-5) (CC
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CKR5_TRAPH
ID CKR5_TRAPH
AC 097879;
DT 30-MAY-20000
DT 30-MAY-20000
DT 15-JUN-2002
DE C-C chemokind
GN CCR5 OR CMKBB
OS Trachypithecu
OC Eukaryota; MM
OC Mammalla; Eul
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pfam; pr00001; 7tm_1; 1.

pr.nvs; pr00237; GPCRHODOPSN.

prOSITE; ps00237; G_PROTEIN_RECEP_F1_1; 1.

prOSITE; ps50262; G_PROTEIN_RECEP_F1_2; 1.

prosite; psf0262; G_PROTEIN
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                                                     Trachypithecus phayrei (Phayre's leaf monkey)
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the European Bioinformatics Institute
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     ; Metazoa;
Eutheria;
                                                                                          (Rel. 39, Created)
(Rel. 39, Last sequence update)
(Rel. 41, Last annotation update)
ne receptor type 5 (C-C CKR-5) (CC-
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  Vertebrata; Eutele
l; Cercopithecidae;
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Pfem; PF00001; 7tm_1; 1
PRINTS; PR00237; GPCRRHODOPSN.
PROSITE; PS00237; GPCTEIN_RECEP_F1_1; 1.
PROSITE; PS00236; G_PROTEIN_RECEP_F1_2; 1.
PROSITE; PS50362; G_PROTEIN_RECEP_F1_1; 1.
PROTEINTIAL).
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Zhang Y.-W., Ryder O.A., Zhang Y.-P.;
Zhang Y.-W., Ryder O.A., Zhang Y.-P.;
"Sequence evolution of the CCR5 chemokine receptor gene in primates.";
Mol. Blol. Evol. 16:1145-1154(1999),
-I- FUNCTION: RECEPTOR FOR A C-C TYPE CHEMOKINE. BINDS TO MIP-1-ALPHA,
MIP-1-BETA AND RANTES AND SUBSEQUENTLY TRANSDUCES A SIGNAL BY
INCREASING THE INTRACELLULAR CALCIUM IONS LEVEL, MAY PLAY A ROLE
IN THE CONTROL OF GRANULOCYTIC LINEAGE PROLIFERATION OR
DIFFERENTIATION.
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SIMILARITY: BELONGS TO FAMILY 1 OF G-PROTEIN COUPLED RECEPTORS.
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30-MAY-2000
30-MAY-2000
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Zhang Y.-W., Ryder O.A., Zhang Y.-P.;
"Sequence evolution of the CCR5 chembkine receptor gene in primates."
MOI. Biol. Evol. 16:1145-1154(199).
-1- FUNCTION: RECEPTOR FOR A C-C TYPE CHEMOKINE. BINDS TO MIP-1-ALPHA
MIP-1-BETA AND RANTES AND SUBSEQUENTLY TRANSDUCES A SIGNAL BY
INCREASING THE INTRACELIULAR CALCIUM IONS LEVEL. MAY PLAY A ROLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                              the European Bloinformatics Institute. The use by non-profit institutions as long modified and this statement is not removed. entitles requires a license agreement (See
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Hylobates leucogenys (White-cheeked gibbon).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hylobatidae; Hylobates.
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SIMILARITY: BELONGS TO FAMILY 1 OF G-PROTEIN COUPLED RECEPTORS.
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61
                                                                                  Similarity
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PS50262;
LKSMTDIYLLNLAISDLFFLLTVPFWAHYAAAQWDFGNTMCQLLTGLYFIGFFSGIFFII 120
                    MDYQVSSPIYDINYYTSEPCQKINVKQIAARLLPPLYSLVFIFGFVGNMLVILILINCKR
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nilarity 97.3%;
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39,
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G_PROTEIN_RECEP_F1_2; 1.
receptor; Transmembrane;
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SULFATION (BY
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EB7C91 CRC64;
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Eukaryota; Metazoa; Chordata;
Mammalia; Eutheria; Primates;
Cercopithecinae; Macaca.
Cercopithecinae; Macaca.
                                                                MEDLINE-97268687; PubMed-9108095;

Eddinger A.L., Amedee A., Miller K., Doranz B.J., Endres M.,

Sharron M., Samson M., Lu Z.H., Clements J.E., Murphey-Corb M.,

Peiper S.C., Parmentier M., Broder C.C., Doms R.W.;

"Differential utilization of CCR5 by macrophage and T cell tropic

simian immunodeficiency virus strains.";

Proc. Natl. Acad. Sci. U.S.A. 94:4005-4010(1997).

-1- FUNCTION: RECEPTOR FOR A C-C TYPE CHEMOKINE. BINDS TO MIP-1-ALPHA

MIP-1-BETA AND RANTES AND SUBSEQUENTLY TRANSDUCES A SIGNAL BY

INCREASING THE INTRACELLULAR CALCIUM IONS LEVEL. MAY PLAY A ROLE

IN THE CONTROL OF GRANULOCYTIC LINEAGE PROLIFERATION OR
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Macaca fascicularis (Crab eating macaque) (Cynomolgus monkey),
Macaca nemestrina (Pig-tailed macaque).
Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostor
                                                                                                                                                                                                           SPECIES=M.mulatta,
MEDLINE=97268687;
                                                                                                                                                                                                                                                                                              "Identification
                                                                                                                                                                                                                                                                                                                       SEQUENCE FROM N.A.
SPECIES-M.mulatta;
MEDLINE-21354176; PubMed-11461684;
                                                                                                                                                                                                                                                                                                                                                                               "Genetically divergent strains of "Genetically divergent strains of CCR5 as a coreceptor for entry.";
J. Virol. 71:2705-2714(1997).
                                                                                                                                                                                                                                                                                                                                                                                                                                     SPECIES-M.mulatta;
MEDLINE-97213934;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Marcon L., Choe H., Martin K.A., Farzan M., Ponath P.D., Newman W., Gerard N., Gerard C., Sodroski J.; "Utilization of C-C chemokine receptor 5 by the envelope glycoproteins of a pathogenic simian immunodeficiency vi
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SPECIES-M.mulatta;
MEDLINE-97184592; PubMed-9032394;
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01-NOV-1997 (Re
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)1-NOV-1997 (Rel. 35, Last sequence update)
)1-NOV-1997 (Rel. 35, Last sequence update)
15-JUN-2002 (Rel. 41, Last annotation update)
15-JUN-2002 (Rel. 41, Last annotation update)
                             SUBCELLULAR LOCATION:
SIMILARITY: BELONGS TO
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                           nembrane protein.
OF G-PROTEIN COUPLED RECEPTORS.
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(Rel. 40, Last annotation update)
ne receptor type 5 (C-C CKR-5) (CC

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EMBL; AF005661; AAB62555.1; -.
Interpro; IPR00276; GPCP TPfam; PF00001; 7tm PRINTS; PROT
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PROSITE; PS50262; G_PROTEIN_RECEP_F1_2; 1.
G-protein coupled receptor; Transmembrane;
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the European Bioinformatics Institute. There are no
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 non-profit institutions as long as its content is d and this statement is not removed. Usage by and for s requires a license agreement (See http://www.isb-sib.an email to license@isb-sib.ch).
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                                          LLTIDRYLAVVHAVFALKARTVTFGVVTSVITWVVAVFASLPGIIFTRSQKEGLHYTCSS
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5; Mismatches
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EMBL; AF005658; AAB62552.1; --
EMBL; AF105287; AAD20556.1; --
EMBL; AF105288; AAD20557.1; --
EMBL; AF105289; AAD20558.1; --
EMBL; AF105299; AAD20559.1; --
EMBL; AF023452; AAC63830.1; --
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Benton P.A., Timanus D.K., Shearer M.H., Lee D.R., Kennedy R.C.;
Benton P.A., Timanus D.K., Shearer M.H., Lee D.R., Kennedy R.C.;
Submitted (NOV-1997) to the EMBL/GenBank/DDBJ databases.
-I- FUNCTION: RECEPTOR FOR A C-C TYPE CHEMOKINE. BINDS TO MIP-1-ALPHA,
-IF FUNCTION: RECEPTOR FOR A C-C TYPE CHEMOKINE. BINDS TO MIP-1-BETA AND RANTES AND SUBSEQUENTLY TRANSDUCES A SIGNAL BY
INCREASING THE INTRACELLULAR CALCIUM IONS LEVEL. MAY PLAY A ROLE
IN THE CONTROL OF GRANULOCYTIC LINEAGE PROLIFERATION OR
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                                                                                                                      TRANSMEM DOMAIN
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MEDLINE-99210133; PubMed-10195758;
Saksena N.K., Wang B., Novembre F.J.,
"Species-specific changes in the CCR5
nonhuman primates.";
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Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Cercopithecidae;
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MEDLINE-97268687; Pu
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European Bioinformatics Institute
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SIMILARITY: BELONGS TO FAMILY 1 OF G-PROTEIN COUPLED RECEPTORS
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PS50262;
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G_PROTEIN_RECEP_f1_2; 1.
receptor; Transmembrane; Glycoprotein;
30 EXTRACELLULAR (POTENTIAL).
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E., Murphey-Corb
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                                                                                         This SWISS-PROT entry is copyright. It is produced through between the Swiss Institute of Bioinformatics and the EM the European Bioinformatics Institute. There are no restruse by non-profit institutions as long as its content
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NCBI_TaxID-9531;
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551902; AAC39830.1;

551903; AAC39831.1;

551904; AAC39832.1;

551905; AAC39833.1;

FIRO00276; GPCR_Rh
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PROSITE; PS50262; G_PROTEIN_RECEP_F1_2; 1.

G-protein coupled receptor; Transmembrane; Glycoprotein; DOMAIN

30 EXTRACELLULAR (POTENTIAL).
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NCBI_TaxID=9534;
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EXTRACELLULAR (POTENTIAL)

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or send an email to license@isb-sib.ch).
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PRINTS; PR00237; GPCRRHODOPSN.
PROSITE: PS00237; G_PROTEIN_RECEP_F1_1;
PROSITE: PS50262; G_PROTEIN_RECEP_F1_2;
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                                                                                                                                                                                                                                                                                                                                                                                                                   This SWISS-PROT entry is copyright. It is produced through between the Swiss Institute of Bioinformatics and the E
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the European Bioinformatics Institute
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sequence of African
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n infections by simian and human
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CKRS_MOUSE STANDARD; PRT; 37. ....
P51682; 061867; P97405; 035313; P97308; 035891;
01-OCT-1996 (Rel. 34, Created)
15-UUL-1998 (Rel. 36, Last sequence update)
16-OCT-2001 (Rel. 40, Last annotation update)
16-OCT-2001 (Rel. 40, Last annotation update)
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STRAIN-129;
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lalpha receptors: evidence for two
receptors on chromosome 9.°;
J. Biol. Chem. 271:7551-7558(1996).
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STRAIN-C57BL/6, and NIH Swiss; TI
MEDLINE-98001387; PubMcd-9343222;
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MEDLINE-96205938; PubMed-8631787;
Boring L., Gosling J., Monteclaro
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Eukaryota; Motazoa;
Mammalia; Euthoria;
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                                                                                                                                           Doranz B.J., Lu Z.H., Rucker J., Zhang T.Y., Sharron M.,
Wang Z.X., Guo H.H., Du J.G., Accavitti M.A., Doms R.W.,
"Two distinct CCR5 domains can mediate coreceptor usage |
                                                                                                                                                                    MEDLINE-97404635; Publ
Doranz B.J., Lu Z.H.,
                                                                                                                                                                                                                                                           "Polymonn S.E., Platt E.J., Kozak
"Polymorphisms in the CCR5 gene
implicate specific amino acids
immunodeficiency viruses.";
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MEDLINE-96278910; Publ
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       "Molecular cloning and functional expression of murine JE (mor
chemoattractant protein 1) and murine macrophage inflammatory
lalpha receptors: evidence for two closely linked C-C chemoking
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                                                                                    SEQUENCE FROM N.A.
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                                                                                                                immunodeficiency virus type 1.";
J. Virol. 71:6305-6314(1997).
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           B., Kuno K., Harada A., Matsushima K.,
mitted (JAN-197) to the EMBL/Genbank/DDBJ databases.
PUNCTION: RECEPTOR FOR A C-C TYPE CHEMOKINE. BINDS TO
MIP-1-BETA AND RANTES AND SUBSEQUENTLY TRANSDUCES A SI
INCREASING THE INTRACELLULAR CALCIUM IONS LEVEL.
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modified and this statement is not removed. Usage by and for commorcial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
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SIMILARITY: BELONGS TO FAMILY 1 OF G-PROTEIN COUPLED
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C; X94151; CAA63867.1; ...

U68565; AAB37273.1; ...

U68565; AAB37273.1; ...

U63327; AAC53386.1; ...

AFC19772; AAC5389.1; ...

L; D83648; BAA12024.1; ...

L; D83648; BAA12024.1; ...
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0001; 7tm_1; 1.
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AAC53386.1; -.
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-> F (IN REF. 2).
-> I (IN REF. 5).
-> Y (IN REF. 3).
-> S (IN REF. 1).
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30-MAY-2000
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J. Neuroimmunol. 86:1-12(1998).
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"Cloning of rat HIV-1-chemokine coreceptor CKR5 from microglia and upregulation of its mRNA in ischemic and endotoxinemic rat brain.";
J. Neurosci. Res. 53:16-28(1998).
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Eukaryota; Metazoa; Chordata;
Mammalia; Eutheria; Rodentia;
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                                                                                                                                                                                                                                                          This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SEQUENCE FROM N.A.
STRAIN-Wistar; TISSUE-Brain;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 STRAIN-Sprague-Dawley; mEDLINE-98318173; PubMed-9655467;
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                                                                   TRANSMEM
DOMAIN
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                                                                                                                                      G-protein
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SIMILARITY: BELONGS TO FAMILY 1 OF G-PROTEIN COUPLED RECEPTORS.
                                                                                                                                                                                                                                                                                                                                                                                                     FUNCTION: RECEPTOR FOR A C-C TYPE CHEMOKINE. BINDS TO MIP-1-ALPHA, MIP-1-BETA AND RANTES AND SUBSEQUENTLY TRANSDUCES A SIGNAL BY INCREASING THE INTRACELLULAR CALCIUM IONS LEVEL.
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rel. 39, Last annotation update)
receptor type 5 (C-C CKR-5) (CC-CKR-5) (CCR-5) (MIP-1
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EXTRACELLULAR (POTENTIAL).
7 (POTENTIAL).
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2 pan troglod
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9 gorilla gor
0 pan troglod
8 colobus pol
1 trachypithe
2 pygathrix a
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2 colobus gue
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## ALIGNMENTS

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Best Local Similarity
Matches 215; Conserv
                                                                                                                                                                                                                                                                                    TSE L.; Ehrenberg P.K.; Chang G., Michael N.L.;
"Genomic Organization and Functional Characterization of the Complete Transcription Unit for the Chemokine Receptor CCR-5, a Major Entry Co-Receptor for HIV-1.";
Submitted (JUN-1997) to the EMBL/GenBank/DDBJ databases.
EMBL; AF009962; AAC23944.1; -.
InterPro; IPR000276; GPCR_Rhodpsn.
Pfam; PF00001; 7tm_1; 1.
PROSITE; PS00237; G_PROTEIN_RECEP_F1_1; UNKNOWN_1.
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01-NOV-1998 (TrEMBLrel. 08,
01-NOV-1998 (TrEMBLrel. 08,
01-DEC-2001 (TrEMBLrel. 19,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Homo sapiens (Human).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SEQUENCE FROM N.A.
Tse L., Ehrenberg P.K.,
61 LKSMTDIYLLNLAISDLFFLLTVPFWAHYAAAQWDFGNTMCQLLTGLYFIGFFSGIFFII 120
61 LKSMTDIYLLNLAISDLFFLLTVPFWAHYAAAQWDFGNTMCQLLTGLYFIGFFSGIFFII 120
                                                                               MDYQVSSPIYDINYYTSEPCQKINVKQIAARLLPPLYSLVFIFGFVGNMLVILILINCKR
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Last annotation update)
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                                                                                                                                                                 Score 1122; DB 4; Pred. No. 5.8e-97; Mismatches 0;
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CCR5
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                                   Pan troglodytes (Chimpanzee).
Eukaryota; Metazoa; Chordata;
Mammalia; Eutheria; Primates;
NCBI_TaxID=9598;
                                                                                                                                                                 01-JAN-1998 (TREMBLIEL 05, 01-JAN-1998 (TREMBLIEL 05, 01-DEC-2001 (TREMBLIEL 19,
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Mammalia; Eutheria;
NCBI_TaxID=9590;
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Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hylobatidae; Hylobates.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Zhang Y., Ryder O.A., "Sequence comparison phylogeny.";
    SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Submitted (AUG-1999) to the EMBL; AF177884; AAK43367.1
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Zhang Y., Ryder O.A.,
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                                                             Craniata; Vertebrata; Euteleostomi; Catarrhini; Hominidae; Pan.
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018771;
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NON_TER
SEQUENCE
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PROSITE; PS00237; G_PROTEIN_RECEP.
PROSITE; PS50262; G_PROTEIN_RECEP.
                                                                                                                                                                                                                                                                                     "HIV-1 subtypes, co-receptor usage, and AIDS Res. Hum. Retroviruses 0:0-0(1997) EMBL, AF011539; AAB65739.1; -.
                                                                                                                                                                                                                                                                                                                                                           SEQUENCE FROM N.A.
STRAIN=CHCCR5-141A;
Zhang L., Carruthers
                                                                                                                                                                                                                                                                                                                                                                                                                                                      Pan troglodytes (Chimpanzee).
Eukaryota; Metazoa; Chordata;
Mammalia; Eutheria; Primates;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRINTS; PRO0237; GPCKRHODOPSN.

PROSITE; PS00237; G_PROTEIN_RECEP_F1_1;

PROSITE; PS50262; G_PROTEIN_RECEP_F1_2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CCR5 receptor (Fragment).
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Zhang L., Carruthers C.D.,
                                                                                                                                                                                                                                                     InterPro; IPR000276; GPCR_Rhodpsn
Pfam; PF00001; 7tm_1; 1.
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Interpro; IPR000276; GPCR. Rhodpsn.
Pfam; PF00001; 7tm.1; 1.
PROSITE; PS00237; G_PROTEIN_RECEP_F1_1; UNKNOWN_1.
PROSITE; PS50262; G_PROTEIN_RECEP_F1_2; 1.
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Mammalia; Eutheria; Primatcs; Catarrhini; Hylobatidae; Hylobates.
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BMBL; AF105291; AAD20560.1; --
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Mueller-Trutwin M.C., Corbet S., Hansen J., Diop O., Georges-Courbot M.-C., Barre-Sinoussi F., Fomsgaard A.; Submitted (NOV-1997) to the EMBL/GenBank/DDBJ databases. EMBL; AF035214; AAD44007.1; -. Interpro; IPR000276; GPCR_Rhodpsn. Pfam; PF00001; 7tm_1; 1. PRINTS; PR00237; GPCRRHODPSN. PRINTS; PS00237; G_PROTEIN_RECEP_F1_1; UNKNOWN_1.
                                                                                                                                                                                                                                                                                                                                                       MEDLINE-99335215; PubMed-10408730; Manen J., Georges-Courbot M.C., Muller-Trutwin M.C., Corbet S., Hansen J., Georges-Courbot M.C., Diop O., Rigoulet J., Barre-Sinoussi F., Fomsgaard A.; "Mutations in CCR5-coding sequences are not associated with SIV carrier status in African nonhuman primates."; AIDS Res. Hum. Retroviruses 15:931-939(1999).
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Eukaryota; Metazoa; Chordata;
Mammalia; Eutheria; Primates;
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PROSITE; PS50262; G_PROTEIN_RECEP_F1_2;
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AAK43364.1;
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Primates;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     40481 MW;
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of the
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96.7%;
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96.2%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Y.;
CCR5
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Pred. No. 1
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                                                                                                                                                                                                                                                                                                                                                                                                             4366F149C3B4938F CRC64;
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L.3e-79;
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01-DEC-2001
01-MAR-2002
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                                                                                                                                                                                                                                                                                                                                    Hylobates agilis unko.
Hylobates agilis unko.
Eukaryota; Metazoa; Chordata;
Wammmalia: Eutheria; Primates;
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SEQUENCE
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PROSITE;
MEDLINE-20317091; PubMed=10747879; Mummidi S., Bamshad M., Ahuja S.S., Gonzalez E., Feuillet P. Mummidi S., Bamshad M., Ahuja S.S., Valente A.J., Murthy K., Bargum K., Galvis M.C., Kostecki V., Valente A.J., Murthy K., Haro L., Dollan M.J., Allan J.S., Ahuja S.K.; Evolution of human and non-human primate CC chemokine recended mRNA. Potential roles for haplotype and mRNA diversity, differential haplotype-specific transcriptional activity, a transcription factor binding to polymorphic nucleotides in
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Eukaryota;
Mammalia;
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Zhang Y., Ryder O.A.,
                                                                                                                                                                                                                                                 SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                          NCBI_TaxID=9583;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Q9MZA3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PROSITE; PS00237; G_PROTEIN_RECEP_F1_1;
PROSITE; PS50262; G_PROTEIN_RECEP_F1_2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      InterPro;
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DEC-2001 (TREMBLIEL 1:
MAR-2002 (TREMBLIEL 2:
chemokine receptor 5:
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TE; PS00237; G_P
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177; Conserv
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; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Eutheria; Primates; Catarrhini; Cercopithecidae; Colobinae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      IPR000276; GPCR_Rhodpsn
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Last annotation updat
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Pred.
                                                                                                                                                                                                                                                                                                                                              Craniata; Ve Catarrhini;
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annotation
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i; Hylobatidae;
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                                                                                                                                                             Feuillet P.M., Murthy K.K.,
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ae; Hylobates.
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Bost Local S
Matches 178
                                                                                                                                                                       Zhang Y.-W., Zhang Y.-P.;

"Sequence evolution of chemokine receptor CCR5 genus submitted (JUN-1998) to the EMBL/GenBank/DDBJ datu EMBL; AF075447; AAD19859.1; -.

EMBL; AF0754447; AAD19859.1; -.

Interpro; IPR000276; GPCR_Rhodpsn.

Pfan; PF00001; 7tml; 1.

PRINTS; PR00237; GPCRRHODOPSN.

PROSITE; PS00237; GPROTEIN_RECEP_F1_1; UNKNOWN_1.

PROSITE; PS00237; G_PROTEIN_RECEP_F1_2; 1.
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J. Biol. Chem. 275:18946:18961(2000).

EMBL; AP25251; AAR87981.;
InterPro; IPR000276; GPCR_rhodpsn.

Piam; PF00001; 7tm_1; 1.

PRINTS; PR000237; GPCRRHODDPSN.

PROSITE; PS00237; G_PROTEIN_RECEP_F1_1; UNKNOWN_1.

PROSITE; PS00237; G_PROTEIN_RECEP_F1_2; 1.
                                                                                                                                                                                                                                                                                                                                                       Pygathrix avunculus (Tonkin snub-nosed monkey), and Pygathrix roxellana (golden snub-nosed monkey). Pygathrix roxellana (golden snub-nosed monkey). Euteleostomi; Eukaryota, Mctazoa; Chordata; Cranlata; Vertebrata; Euteleostomi; Mammalla; Eutheria; Primates; Catarrhini; Cercopithecidae; Colobinae;
                                                                                                                                                                                                                                                                                                                                                                                                                  01-MAY-1999 (TrEMBLrel. 10, Created)
01-MAY-1999 (TrEMBLrel. 10, Last sequence up
01-JUN-2001 (TrEMBLrel. 17, Last annotation
C-C chemokine receptor type 5.
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Spearman P.W., Mburu D.N., Graham B.S.;

Noifferential Utilization of CCTS Molecules from Three East

Simian Species by the HIV-1 Envelope Glycoprotein.";

Submitted (APR-199) to the EMBL/GenBank/DDBJ databases.

R EMBL; AF141639; AAD32684.1; ".

R InterPro; IPR000276; GPCR_Rhodpsn.

R Pfam; PP00001; 7tm.1; 1.

R PRINTS; PR00237; GPCRRHODOPSN.

R PROSITE; PS00237; GPROTEIN_RECEP_F1_1; UNKNOWN_1.

R PROSITE; PS00237; G_PROTEIN_RECEP_F1_2; 1.
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Matches 176; Conserv
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01-NOV-1999
01-DEC-2001
                         Nasalis larvatus (Proboscis monkey)
Eukaryota; Metazoa; Chordata; Crani
Mammalia; Eutheria; Primates; Catar
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01-DEC-2001 (TremBLrel.
01-MAR-2002 (TremBLrel.
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Mammalia; Eutheria;
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ta; Metazoa; Chordata; Craniata; Vertebrata; Eutele
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                                                                                                                                                                                                                                              Created)
                            Craniata; Vertebrata;
Catarrhini; Cercopith
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"Sequence comparison of the CCR5 gene in primates and primate phylogeny.";
Shanthera' ''''
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EMBL; AF17882; AAK43365.1; -
EMBL; AF17882; ACK43365.1; -
Enterpro; IPR000276; GECR_Rhodpsn.
Pfam; PF00001; 7tm_1; 1.
PROSITE; PS00237; G_PROTEIN_RECEP_F1_1; UNKNOWN_1.
PROSITE; PS50262; G_PROTEIN_RECEP_F1_2; 1.
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Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Cercopithecidae;
Cercopithecinae; Miopithecus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               01-DEC-2001 (TremBLrel. 19,
01-DEC-2001 (TremBLrel. 19,
01-MAR-2002 (TremBLrel. 20,
C-C chemokine receptor 5.
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EMBL; AF177886; AAK43369.1; -
InterPro; IPR000276; GPCR_Rhodpsn.
Pfam; PF00001; 7tm_1; 1.
                                                                                                                                                                                                                                                                                                                                                                                                        SEQUENCE FROM N.A., Zhang Y.; Zhang Y.; Ryder O.A., Zhang Y.; sequence comparison of the CCR5 gene in primates and primate phylogeny.";
                                                                                                                                                                                                                                               Receptor
                                                                                                                                                                                                                                                                     prosite; ps00237; G_protein_recep_f1_1;
prosite; ps50262; G_protein_recep_f1_2;
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                                               LKSMTDIYLLNLAISDLFFLLTVPEWAHYAAAQWDFGNTMCQLLTGLYFIGFFSGIFFII 120
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96.2%;
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Last annotation update)
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Pred. No. 3.1e-79;
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InterPro; IPR000276; GPCR_Rhodpsn.
pfam; pF00001; 7tm_1: gPCRRHODOPSN.
pRINTS; PR00237; GPCRHODOPSN.
pROSITE; pS00237; G_PROTEIN_RECEP_F1_1; UNKNOWN_1
pROSITE; PS50262; G_PROTEIN_RECEP_F1_2; 1.
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Eukaryota; Metazoa; Chordata;
Mammalia; Eutheria; Primates;
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STRAIN-MACCR5-140A;
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/cgn2_6/ptodata/1/paa/US06_NEW_COMB.pep:*
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PCT-US03-03763-1
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US-09-949-004-242
US-10-265-8814-1
US-10-265-8814-1
US-10-323-314-1
US-10-323-314-1
US-10-360-828-1
US-10-360-828-1
US-10-390-423-67
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US-60-453-135-7850
US-60-455-444-4380
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	4290, Ap	7701, Ap	7701, Ap	12373, A	10296, A	8			244, App		162, App	164, App	11221, A	443, App	7700, Ap	4289, Ap	4289, Ap	7700, Ap	7700, Ap

#### ALIGNMENTS

ġ ġ 밁 Ş δÃ 밁 ; TYPE: PRT; ORGANISM: Homo PCT-US02-29560-259 밁 PCT-US02-29560-259 100.0%; Best Local Similarity 100.0%; Matches 352; Conservation SEQ ID NO 259 LENGTH: 352 Sequence 259, Applic GENERAL INFORMATION: APPLICANT: EOS Biotechnology, Inc.
TITLE OF INVENTION: Methods of Diagnosis of Cancer, Compositions and
TITLE OF INVENTION: Methods of Screening for Modulators of Cancer
FILE REFERENCE: 018501-002710PC
CURRENT APPLICATION NUMBER: PCT/US02/29560
CURRENT FILING DATE: 2025-11-01
PRIOR APPLICATION NUMBER: US 60/323,469
PRIOR FILING DATE: 2001-09-17 NUMBER OF SEQ ID NOS: 412 SOFTWARE: FastSEQ for Windows Version 3.0 APPLICANT: APPLICANT: APPLICANT: Afar, Daniel APPLICANT: 121 241 181 121 61 61 LKSMTDIYLLNLAISDLFFLLTVPFWAHYAAAQWDFGNTMCQLLTGLYFIGFFSGIFFII 120 Aziz, Natasha Gish, Kurt C. Hevezi, Peter A. Mack, David H. LLTIDRYLAVVHAVEALKARTVTFGVVTSVITWVVAVEASLPGIIFTRSQKEGLHYTCSS 180 HFPYSQYQFWKNFQTLKIVILGLVLPLLVMVICYSGILKTLLRCRNEKKRHRAVRLIFTI 240 MIVYFLFWAPYNIVLLLNTFQEFFGLNNCSSSNRLDQAMQVTETLGMTHCCINPIIYAFV LKSMTDIYLLNLAISDLFFLLTVPFWAHYAAAQWDFGNTMCQLLTGLYFIGFFSGIFFII Wilson, Keith E. Zlotník, Albert Application PC/TUS0229560 sapiens 0 Score 1841; DB 1; Pred. No. 2.5e-171; Mismatches Length 352; Indels 0 Caps 120 60

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PCT-US02-06345-1
   NUMBER OF SEQ ID NOS:
SOFTWARE: PatentIn ver
SEQ ID NO 1
                                                                                                                                                                                                                                                                Sequence 1, Application PC/TUS0303763 GENERAL INFORMATION:
                                              CURRENT APPLICATION NUMBER: PCT/US03/03763
CURRENT FILING DATE: 2003-02-07
PRIOR APPLICATION NUMBER: US 10/071,866
PRIOR FILING DATE: 2002-02-08
PRIOR APPLICATION NUMBER: US 10/072,301
PRIOR FILING DATE: 2002-02-08
PRIOR APPLICATION NUMBER: US 10/133,978
PRIOR APPLICATION NUMBER: US 10/133,978
PRIOR FILING DATE: 2002-04-25
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                                                                                                                                                                                           APPLICANT: Pauling, Michelle H.
APPLICANT: Zhu, Li
TITLE OF INVENTION: METHODS FOR GENERATING
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT: Progenics Pharmaceuticals, Inc.
TITLE OF INVENTION: Sulfated CCR5 Peptides
FILE REFERENCE: 61010-AB1-PCT/JPW/JTL
                                                                                                                                                                                   FILE REFERENCE: 25636-728
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CURRENT FILING DATE: 2002-02-28
NUMBER OF SEQ ID NOS: 2
SOFTWARE: Patentin version 3.0
                                                                                                                                                                                                                                               APPLICANT: Hua, Shaobing
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Pred. No. 2.5e-171;
; Mismatches 0;
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                                                                                                                                                                                                                                                                                                                                        SOFTWARE: FASTSEQ 1 SEQ ID NO 303 LENGTH: 352 TYPE: PRT
                                                                                                                                                                                                                                                             Query Match
Best Local
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Best Local :
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CURRENT FILING DATE: 2000-01-28
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT: VENTER, J. Craig et al.
TITLE OF INVENTION: POLYMORPHISMS IN KNOWN GENES ASSOCIATED
TITLE OF INVENTION: WITH INFLAMMATORY AUTOIMMUNE DISEASE, I
                                                                                                                                                                                                                                                                                                                                                                                                      PRIOR APPLICATION NUMBER: 60/231,401
PRIOR FILING DATE: 2000-09-08
NUMBER OF SEQ ID NOS: 10823
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FILE REFERENCE: CL000790
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                  181
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                                                               LLTIDRYLAVVHAVFALKARTVTFGVVTSVITWVVAVFASLPGIIFTRSQKEGLHYTCSS
                HFPYSQYQFWKNFQTLKIVILGLVLPLLVMVICYSGILKTLLRCRNEKKRHRAVRLIFTI
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                                                LLTIDRYLAVVHAVFALKARTVTFGVVTSVITWVVAVFASLPGIIFTRSQKEGLHYTCSS
                                                                                                              LKSMTDIYLLNLAISDLFFLLTVPFWAHYAAAQWDFGNTMCQLLTGLYFIGFFSGIFFII
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Conservative
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Pred. No. 2.5e-171;
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                                                                                                                                                                                                                                              Mismatches
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2.5e-171;
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; ORGANISM: Human
US-09-949-004-242
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US-09-949-004-242
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                 Sequence 1, Application US/10086814
GENERAL INFORMATION:
APPLICANT: Dragic, Tatjana
APPLICANT: Olson, William C.
TITLE OF INVENTION: SULFATED CCR5 PEPTIDES FOR HIV-1
FILE REFERENCE: 61010-AB-1
CURRENT APPLICATION NUMBER: US/10/086,814
CURRENT FILING DATE: 2002-02-28
NUMBER OF SEQ ID NOS: 38
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PRIOR FILING DATE: 2000-09-13
NUMBER OF SEQ ID NOS: 6961
SOFTWARE: FastSEQ for Windows Version
SEQ ID NO 242
LENGTH: 352
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Best Local
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TITLE OF INVENTION: RECEPTOR GENES ASSOCIATED WITH DISEASE, METHODS OF DETECTION
TITLE OF INVENTION: AND USES THEREOF
FILE REPERENCE: CL000848
CURRENT APPLICATION NUMBER: US/09/949,004
CURRENT FILING DATE: 2002-12-20
       NUMBER OF SOFTWARE:
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Pred. No. 2.5e-171;
D; Mismatches 0;
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                                                                                                                              PRIOR APPLICATION NUMBER: US 60/323,469
PRIOR FILLING DATE: 2001-09-17
PRIOR PELICATION NUMBER: US 60/323,887
PRIOR PELICATION NUMBER: US 60/325,114
PRIOR APPLICATION NUMBER: US 60/325,114
PRIOR PELICATION NUMBER: US 60/340,944
PRIOR PELICATION NUMBER: US 60/340,944
PRIOR PELICATION NUMBER: US 60/350,666
PRIOR PELICATION NUMBER: US 60/350,666
PRIOR PELICATION NUMBER: US 60/355,145
PRIOR PELICATION NUMBER: US 60/355,145
PRIOR APPLICATION NUMBER: US 60/355,145
PRIOR PELICATION NUMBER: US 60/355,257
PRIOR APPLICATION NUMBER: US 60, PRIOR FILING DATE: 2002-04-04 PRIOR APPLICATION NUMBER: US 60, PRIOR FILING DATE: 2002-04-12 NUMBER OF SEQ ID NOS: 412 SOFTWARE: FASTSEQ for Windows Verseq ID NO 259
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   SOFTWARE:
SEQ ID NO 2
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TITLE OF INVENTION: Methods of Diagnosis of Cancer, Compositions
TITLE OF INVENTION: Methods of Screening for Modulators of Cance
FILE REFERENCE: 018501-002710US
                                                                                                                                                                                                                                                                                                                                                                                                 CURRENT APPLICATION NUMBER: US/10/245,882
CURRENT FILING DATE: 2002-12-13
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ORGANISM:
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Gish, Kurt C.
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Pred. No. 2.5e-171;
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; TYPE: PRT
; ORGANISM: human
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APPLICANT: Olson, William
TITLE OF INVENTION: SULFATED CCR5 PEPTIDES FOR HIV-1 INFECTION
FILE REFERENCE: 2048/61010-1/JFM/MAF/DJK
CURRENT APPLICATION NUMBER: US/10/323,314
CURRENT FILING DATE: 2002-12-19
NUMBER OF SEG ID NOS: 17
SOFTWARE: Patentin version 3.0
SEG ID NO 1
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 MIVYFLFWAPYNIVLLLNTFQEFFGLNNCSSSNRLDQAMQVTETLGMTHCCINPIIYAFV
                                         HFPYSQYQFWKNFQTLKIVILGLVLPLLVMVICYSGILKTLLRCRNEKKHRAVRLIFTI 240
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                                                                                   LLTIDRYLAVVHAVFALKARTVTFGVVTSVITWVVAVFASLPGIIFTRSQKEGLHYTCSS
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Pred. No. 2.5e-171;
); Mismatches 0;
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RESULT 10
US-10-290-058A-6
TITLE OF INVENTION: Methods and Compositions for TITLE OF INVENTION: UroLogical Disorders Using FILE REFERENCE: MPIO1-289pink
CURRENT APPLICATION NUMBER: US/10/290,058A
CURRENT FILING DATE: 2002-11-07
PRIOR APPLICATION NUMBER: 60/344,552
PRIOR APPLICATION NUMBER: 60/344,552
PRIOR FILING DATE: 2001-11-07
NUMBER OF SEQ ID NOS: 15
SOFTWARE: FastSEQ for Windows Version 4.0
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US-10-225-567A-352
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US-10-225-567A-352
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GENERAL INFORMATION:
APPLICANT: LifeSpan Biosciences
APPLICANT: Brown, Joseph P.
APPLICANT: Burmer, Glenna C.
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PRIOR FILING DATE: 2000-12-19
NUMBER OF SEQ ID NOS: 2292
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TYPE: PRT
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Roush, Christine L.
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Pred. No. 2.5e-171;
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CURRENT APPLICATION NUMBER: US/10/360,828
CURRENT FILING DATE: 2003-02-07
PRIOR APPLICATION NUMBER: US 10/071,866
PRIOR FILING DATE: 2002-02-08
PRIOR APPLICATION NUMBER: US 10/072,301
PRIOR PILING DATE: 2002-02-08
PRIOR PILING DATE: 2002-04-08
PRIOR FILING DATE: 2002-04-25
NUMBER OF SEQ ID NOS: 64
SOFTWARE: PAtentin version 3.1
SEQ ID NO 1
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US-10-290-058A-6
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TITLE OF INVENTION: HUMAN MONOCLONAL ANTIBODIES AGAINST MEMBRANE PROTEINS
FILE REFERENCE: 25636-727
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ORGANISM: Homo sapiens
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Pred. No. 2.5e-171;
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US-10-239-423-67
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GENERAL INFORMATION:
APPLICANT: FORSSMANN, Wolf-Georg; FORSSMANN, Ulf; ADERMANN, Knut;
APPLICANT: HEITLAND, Aleksandra; SPODSBERG, NIKolaj
TITLE OF INVENTION: Diagnostic Agent and Medicament for Examining the
TITLE OF INVENTION: Cell Surface Proteome of Tumor and Inflammation Cells of INVENTION: To Treating Tumor Diseases and Inflammatory Diseases,
TITLE OF INVENTION: Preferably with the Aid of Specific Chemokine
TITLE OF INVENTION: Receptor Analysis and Chemokine Receptor/Ligand Interaction Tumor Application NUMBER: US/10/239,423
CURRENT APPLICATION NUMBER: US/10/239,423
BRIOD ADDITION WINDER: 2002-09-23
BRIOD ADDITION WINDER: DECICATION NUMBER: US/10/239,423
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Best Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CURRENT FILING DATE: 2002-09-23
PRIOR APPLICATION NUMBER: DEIO016013.1
PRIOR FILING DATE: 2000-03-31
NUMBER OF SEQ ID NOS: 84
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TYPE: PRT ORGANISM: Artificial Sequence
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              GEKFRNYLLVFFQKHIAKRFCKCCSIFQQEAPERASSVYTRSTGEQEISVGL 352
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Pred. No. 2.5e-171;
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RESULT 13

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TITLE OF INVENTION: GENETIC POLYMORPHISMS AS:
TITLE OF INVENTION: ALZHEIMER'S DISEASE, MET
FILE REFERENCE: CLU01450
CURRENT APPLICATION UNMBER: US/60/452,680
CURRENT FILING DATE: 2003-03-07
NUMBER OF SEQ ID NOS: 116213
SOFTWARE: FASTSEQ for Windows Version 4.0
SEQ ID NO 12568
LENGTH: 352
                                                                                                                                                   APPLICANT: CARCILL, Michele
APPLICANT: IAKOUBOVA, Olga
TITLE OF INVENTION: GENETIC POLYMORPHISMS ASSOCIATED WIT
TITLE OF INVENTION: MYOCARDIAL INFARCTION, METHODS OF D
FILE REFERENCE: CL001456
CURRENT APPLICATION NUMBER: US/60/453,135
CURRENT FILING DATE: 2003-03-10
NUMBER OF SEQ ID NOS: 82765
NUMBER OF SEG ID NOS: 82765
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 7850
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US-60-452-680-12568
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Sequence 12568, Application GENERAL INFORMATION:
APPLICANT: CARGILL, Michelappic, Andrew APPLICANT: GRUPE, Andrew
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US-60-453-135-7850
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Similarity 100.0%;
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pred. No. 2.5e-171;
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Pred. No. 2.5e-171;
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US-60-453-050-7850
; Sequence 7850, Applic
; GENERAL INFORMATION:
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APPLICANT: LUKE, May
APPLICANT: LUKE, May
TITLE OF INVENTION: GENETIC POLYMORPHISMS ASSOCIATED WITH
TITLE OF INVENTION: STENOSIS, METHODS OF DETECTION AND USES THEREOF
TITLE OF INVENTION: STENOSIS, METHODS OF DETECTION AND USES THEREOF
TILE REFERENCE: CLOO1457
CURRENT APPLICATION NUMBER: US/60/453,050
CURRENT FILING DATE: 2003-03-10
NUMBER OF SEQ ID NOS: 82762
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 7850
LEMGTH: 352
TYPE: PRT
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Similarity 100.0%; Pred. No. 2.5e-171;
52; Conservative 0; Mismatches 0;
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GEKFRNYLLVFFQKHIAKRFCKCCSIFQQEAPERASSVYTRSTGEQEISVGL
           GEKFRNYLLVFFQKHIAKRFCKCCSIFQQEAPERASSVYTRSTGEQEISVGL 352
                                                 MIVYFLFWAPYNIVLLLNTFQEFFGLNNCSSSNRLDQAMQVTETLGMTHCCINPIIYAFV
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Search completed: June Job time: 80.2222 secs

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GenCore version 5.1.6 Copyright (c) 1993 - 2003 Compugen Ltd

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Post-processing: Minimum Match 0%
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Listing first 45 summaries
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US-09-626-500-6
US-09-626-939-6
US-09-938-703-6
US-09-938-719-6
US-09-939-226-6
US-60-182-562-1416
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equence 2, Appl	Sequence 844, App	equence 2,	equence 22, i	e  -	equence 2,	equence 1,	equence 1,	equence 22,		Ç	equence 5,	47	15,	Sequence 1, Appli	22,	22,	e 2, App	14, A	•	Sequence 5, Appli	G CF	ค ผ	დ გა	2, App	e 2, App	e 4, App	equence 2,	6 2	22,	3,	۰,	22,	22,	4, App	4, App	4, App	4, App	Sequence 4, Appli

## ALIGNMENTS

US-09-626-500-6

Sequence 6, Application US/09626500

REPEAL INFORMATION:
APPLICANT: SAMSON, MICHEL
APPLICANT: SAMSON, MICHEL
APPLICANT: VASSART, GILBERT
APPLICANT: VASSART, GILBERT
APPLICANT: VASSART, GILBERT
APPLICANT: LIBERT, FREDERICK
TITLE OF INVENTION: ACTIVE AND INACTIVE CC-CHEMOKINES RECEPTOR
TITLE OF INVENTION: AND NUCLEIC ACID MOLECULES ENCODING SAID RECEPTOR
OUMBER OF SEQUENCES: 17
CORRESPONDENCE ADDRESS:
ADDRESSEE: KNOBBE, Martens, Olson & Bear
STREET: 620 Newport Center Drive 16th Floor
CITY: Newport Beach
STATE: CA
COUNTRY: U.S.A.
ZIP: 93660
COMPUTER READABLE FORM:
MEDIUM TYPE: Flopy disk
COMPUTER: IBM PC Compatible
OPERATION SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25 (EPO)
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/626,500
FILING DATE:
CLASSIFICATION NUMBER: US/09/626,500
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/833,752

FILING DATE: ATTORNEY/AGENT INFORMATION:

NAME: Altman, Danie.
REGISTRATION NUMBER:

Daniel E UMBER: 34,115

REFERENCE/DOCKET NUMBER:

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Best Local Similarity
Matches 215; Conserv
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                                   INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             MOLECULE TYPE: protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT: PARMENTIER, MARC
APPLICANT: VASSART, GILBERT
APPLICANT: LIBERT, FREDERICK
TITLE OF INVENTION: ACTIVE AND INACTIVE CC-CHEMOKINES RECEPTOR
TITLE OF INVENTION: AND NUCLEIC ACID MOLECULES ENCODING SAID RECEPTOR
NUMBER OF SEQUENCES: 17
                                                                                                                                                                                                                                                    COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25 (EPO)
CURRENT APPLICATION DATA:
                                                                                       ATTORNEY/AGENT INFORMATION:
NAME: Altman, Daniel E
REGISTRATION NUMBER: 34,115
                                                                                                                                                                                                                                                                                                                                            COMPUTER READABLE FORM:
                                                                                                                                                                                                                                                                                                                                                                                                                                CORRESPONDENCE ADDRESS:
ADDRESSEE: Knobbe, Martens, Olson & Bear
STREET: 620 Newport Center Drive 16th Floor
                                                                                                                                                                                 CLASSIFICATION:
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TYPE: amino acid
TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              LENGTH:
                                                      REGISTRATION NO....REFERENCE/DOCKET NUMBER:
                                                                                                                                               FILING DATE:
                                                                                                                                                                APPLICATION NUMBER:
                                                                                                                                                                                                                                     APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                         MEDIUM TYPE:
                                                                                                                                                                                                                                                                                                                                                                              COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                               CITY: Newport Beach
                    ENGTH:
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amino acid
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US-09-938-703-6
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Best Local S
Matches 215
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GENERAL INFORMATION:
APPLICANT: SAMSON, MICHEL
                                              Query Match
Best Local Similarity
Matches 215; Conserv
                                                                                                                                                                                                                               INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                            COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

COMPUTER: IBM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: Patentin Release #1.0, Version

CURRENT APPLICATION DATA:

APPLICATION UMBER: US/09/938,703

FILING DATE: 24-Aug-2001

CLASSIFICATION: CUnknown>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CORRESPONDENCE ADDRESS:
ADDRESSEE: Knobbe, Martens,
STREET: 620 Newport Center |
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              VASSART, GILBERT
LIBERT, FREDERICK
TITLE OF INVENTION: ACTIVE AND INACTIVE CC-CHEMOKINES RECEPTOR
AND NUCLEIC ACID MOLECULES ENCODING SAID RI
                                                                                                                                                                                                                                                               ATTORNEY/AGENT INFORMATION:
NAME: Altman, Daniel E
REGISTRATION NUMBER: 34,115
                                                                                                                                                MOLECULE TYPE: protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NUMBER OF SEQUENCES:
                                                                                                                                                                                                               SEQUENCE CHARACTERISTICS:
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                                                                                                                                  SEQUENCE DESCRIPTION: SEQ ID NO:
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1 MDYQVSSPIYDINYYTSEPCQKINVKQIAARLLPPLYSLVFIFGFVGNMLVILILINCKR
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                                                                                                                                                                                                                                                                                                               APPLICATION NUMBER: 09/626,939 FILING DATE: 2000-07-27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CITY: Newport Beach
STATE: CA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              COUNTRY: U.S.A.
                                                                                                                                                                                TYPE: amino acid
                                                                                                                                                                                                   LENGTH: 215 amino acids
                                                                                                                                                                                                                                                  REFERENCE/DOCKET NUMBER: <Unknown>
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Pred. No. 1.5e-103;
                                                 Score 1122; DB 23;
Pred. No. 1.5e-103;
); Mismatches 0;
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TOPOLOGY: Inear
HOLECULE TYPE: Protein
SEQUENCE DESCRIPTION: SEQ ID NO:
US-09-938-719-6
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US-09-938-719-6
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GENERAL INFORMATION:
APPLICANT: SAMSON, MICHEL
                                                                                                                                                                                                                    Best Local Similarity Matches 215; Conserv
                                                                                                                                                                                                                                                      Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICATION NUMBER: 09/626,939
FILING DATE: 27-JULY-2000
ATTORNEY/AGENT INFORMATION:
NAME: Altman, Daniel E
REGISTRATION NUMBER: 34,115
REFERENCE/DOCKET NUMBER: <Unknown>
INFORMATION FOR SEQ ID NO: 6:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/938,719
FILING DATE: 24-Aug-2001
CLASSIFICATION: -CURROWND
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      VASSART, GILBERT
LIBERT, FREDERICK
TITLE OF INVENTION: ACTIVE AND INACTIVE CC-CHEMOKINES RECEPTOR
AND NUCLEIC ACID MOLECULES ENCODING SAID RECEPTOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CORRESPONDENCE ADDRESS:
ADDRESSEE: Knobbe, Martens, Olson & Bear
STREET: 620 Newport Center Drive 16th Floor
                                                                                                                                                                                                                                                                                                                                                                                                  SEQUENCE CHARACTERISTICS:
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181
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                                                                                                                                                                                                                                                                                                                                                              TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    COMPUTER: IBM PC Compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25 (EPO)
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                                                                                                                                               MDYQVSSPIYDINYYTSEPCQKINVKQIAARLLPPLYSLVFIFGFVGNMLVILILINCKR 60
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STATE: CA
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                                                                         LKSMTDIYLLNLAISDLFFLLTVPFWAHYAAAQWDFGNTMCQLLTGLYFIGFFSGIFFII
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                                                                                                                                                                                                                   100.0%; (llarity 100.0%; (Conservative 0;
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                                                                                                                                                                                                                                    Score 1122; DB 23;
Pred. No. 1.5e-103;
                                                                                                                                                                                                                      Mismatches
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US-09-939-226-6
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                                                                                                                                                                                                                                                                                                                                                                             y Match 100.0%; Score 1122; DB 23; Local Similarity 100.0%; Pred. No. 1.5e-103; hes 215; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/939,226
FILING DATE: 24-Aug-2001
CLASSIFICATION: <Unknown>
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VASSART, GILBERT
LIBERT, FREDERICK
TITLE OF INVENTION: ACTIVE AND INACTIVE CC-CHEMOKINES RECEPTOR
AND NUCLEIC ACID MOLECULES ENCODING SAID RECEPTOR
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NAME: Altman, Daniel E
REGISTRATION NUMBER: 34,115
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TOPOLOGY: linear
MOLECULE TYPE: protein
SEQUENCE DESCRIPTION: SEQ ID NO: 6:
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MEDIUM TYPE: Flopp
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CORRESPONDENCE ADDRESS:
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                                                                                        HFPYIKDSHLGAGPAAACHGHLLLGNPKNSASVSK 215
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                                                                                                                                                                LLTIDRYLAVVHAVFALKARTVTFGVVTSVITWVVAVFASLPGIIFTRSQKEGLHYTCSS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            LENGTH: 215 amino acids
TYPE: amino acid
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GENERAL INFORMATION:

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SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 1416
LENGTH: 191
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Best Local Similarity
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REFERENCE/DOCKET NUMBER: INFORMATION FOR SEQ ID NO: 4:
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CURRENT FILING DATE: 2000-02-15
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TITLE OF INVENTION: RECEPTORS, NUCLEIC ACID MOLECULES ENCODING HUMAN GPCR
TITLE OF INVENTION: PROTEINS, AND USES THEREOF
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                                  ATTORNEY/AGENT INFORMATION:
NAME: Altman, Daniel E
REGISTRATION NUMBER: 34,
                                                                                                                                                                                                                                                                             COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy
                                                                                                                                                                                                                                                                                                                                                                   CORRESPONDENCE ADDRESS:
ADDRESSEE: Knobbe, Martens, Olson
STREET: 620 Newport Center Drive
CITY: Newport Beach
                                                                                                                              CLASSIFICATION: PRIOR APPLICATION DATA:
                                                                                                                                                                                                       SOFTWARE: PatentIn Release #1.0, Version #1.25 (EPO) CURRENT APPLICATION DATA:
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                                                                                                                                                                                                                                          COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                              FILING DATE:
                                                                                                             APPLICATION NUMBER:
                                                                                                                                                                     FILING DATE:
                                                                                                                                                                                      APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                  COUNTRY:
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                                                                                                                                                                                                                                                                             Floppy disk
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ACTIVE AND INACTIVE CC-CHEMOKINES RECEPTOR
AND NUCLEIC ACID MOLECULES ENCODING SAID R
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99.0%;
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Pred. No. 2.
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Drive 16th Floor
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                                                          ; MOLECULE TYPE: protein US-09-626-939-4
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Query Match
Best Local Similarity
Matches 184; Conserv
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Best Local Similarity
                                                                                                                                                     INFORMATION FOR SEQ ID NO:
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MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
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                                                                                                                                                                                                                                         PRIOR APPLICATION DATA:
APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                   SOFTWARE: PatentIn Release #1.0, CURRENT APPLICATION DATA:
                                                                                                                                    SEQUENCE CHARACTERISTICS:
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                                                                                         TOPOLOGY:
                                                                                                                                                                REGISTRATION NUMBER: 34
REFERENCE/DOCKET NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                             COUNTRY: UZIP: 92660
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                                                                                                                                                                                                                                                                                                                                                OPERATING SYSTEM: PC-DOS/MS-DOS
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                                                                                                                                                                                                                                                                                                       APPLICATION NUMBER:
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                                                                                                                                                                                                  NAME:
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Newport Beach
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GY: linear
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amino acid
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                                                                                                                       184 amino acids
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LIBERT, FREDERICK
VENTION: ACTIVE AND INACTIVE CC-CHEMOKINES
                                                                                                                                                                                                                                                                                                                                                                                                                        U.S.A.
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   Conservative
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O Newport Center Drive 16th Floor
                                                                                                                                                                                             Daniel
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               85.4%;
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           Score 958; DB 20;
Pred. No. 3.3e-87;
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Pred. No.
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   Mismatches
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                             Length 184;
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RESULT 9
US-09-938-703-4
; Sequence 4, Application US/09938703
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                                                                                                                                                                         Query Match
Best Local Similarity
Matches 184; Conserv
                                                                                                                                                                                                                                                                                                                                                                  NAME: Altman, Daniel E
REGISTRATION NUMBER: 34,115
REFERENCE/DOCKET NUMBER: <Unknown>
INFORMATION FOR SEQ ID NO: 4:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/938,703
FILING DATE: 24-Aug-2001
CLASSIFICATION: <Unknown>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CORRESPONDENCE ADDRESS:
ADDRESSEE: Knobbe, Martens, Olson & Bear
STREET: 620 Newport Center Drive 16th Floor
CITY: Newport Beach
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VASSART, FREDERICK
LIBERT, FREDERICK
TITLE OF INVENTION: ACTIVE AND INACTIVE CC-CHEMOKINES RECEPTOR
AND NUCLEIC ACID MOLECULES ENCODING SAID RECEPTOR
                                                                                                                                                                                                                                                                                                                                                                                                                                    PRIOR APPLICATION DATA:
APPLICATION NUMBER: 09/626,939
FILING DATE: 2000-07-27
ATTORNEY/AGENT INFORMATION:
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                                                    LKSMTDIYLLNLAISDLFFLLTVPFWAHYAAAQWDFGNTMCQLLTGLYFIGFFSGIFFII 120
   LLTIDRYLAVVHAVFALKARTVTFGVVTSVITWVVAVFASLPGIIFTRSQKEGLHYTCSS 180
                                    LKSMTDIYLLNLAISDLFFLLTVPFWAHYAAAQWDFGNTMCQLLTGLYFIGFFSGIFFII 120
                                                                                                                                                                                                                                                                                               LENGTH: 184 amino acids TYPE: amino acid TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SOFTWARE: PatentIn Release #1.0, Version
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS
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                                                                                                                                                                          Conservative
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                                                                                                                                                                     85.4%; Score 958; DB 23;
100.0%; Pred. No. 3.3e-87;
7ative 0; Mismatches 0;
                                                                                                                                                                                                         Length 184;
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US-09-938-719-4
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                                                                                                                                                                                                                                                                                      Query Match
Best Local
                                                                                                                                                                                                                                                                      Matches 184;
                                                                                                                                                                                                                                                                                                                                                                                                                                   ATTORNEY/AGENT INFORMATION:
NAME: Altman, Daniel E
REGISTRATION NUMBER: 34,115
REFERENCE/DOCKET NUMBER: <UT
INFORMATION FOR SEQ ID NO: 4:
SEQUENCE CHARACTERISTICS:
SEQUENCE CHARACTERISTICS:
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OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NUMBER OF SEQUENCES: 17
CORRESPONDENCE ADDRESS:
CORRESSEE: Knobbe, Martens, Olson & Bear
STREET: 620 Newport Center Drive 16th Floor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  VASSART, GILBERT

TITLE OF INVENTION: ACTIVE AND INACTIVE CC-CHEMOKINES RECEPTOR

AND NUCLEIC ACID MOLECULES ENCODING SAID RECEPTOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRIOR APPLICATION DATA:
APPLICATION NUMBER: 09/626,939
FILING DATE: 27-JULY-2000
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MEDIUM TYPE: Floppy disk
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                                                                                                                                                                                                                                                                                    Similarity
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FILING DATE: 24-Aug-2001
CLASSIFICATION: <Unknown>
                               HFPY 184
                                                                                                                                                                                                     MDYQVSSPIYDINYYTSEPCQKINVKQIAARLLPPLYSLVFIFGFVGNMLVILILINCKR
                                                                                                                                                                                                                                                                                                                                                                                                      TYPE: amino acids
                                                                                                                                  LKSMTDIYLLNLAISDLFFLLTVPFWAHYAAAQWDFGNTMCQLLTGLYFIGFFSGIFFII
                                                                                                                                                                                                                                                                                                                                                                                        TOPOLOGY: linear
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                                                                                                                                                                                                                                                                    Score 958; DB 23; ; Pred. No. 3.3e-87; 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           <Unknown>
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RESULT 11

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                                                                                                                                 Sequence 22, Application PC/TUS0104152A GENERAL INFORMATION:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
                                                                                        APPLICANT: Human Genome Sciences, APPLICANT: Rosen, Craig A.
                           APPLICANT:
                                               APPLICANT:
                                                                   APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    REFERENCE/DOCKET NUMBER: <Unknown>
INFORMATION FOR SEQ ID NO: 4:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Local Similarity
OF INVENTION: Human G-protein Chemokine Receptor (CCR5) HDGNR10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/939,226
FILING DATE: 24-Aug-2001
CLASSIFICATION: <Unknown>
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LIBERT, FREDERICK
TITLE OF INVENTION: ACTIVE AND INACTIVE CC-CHEMOKINES RECEPTOR
AND NUCLEIC ACID MOLECULES ENCODING SAID RECEPTOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            MOLECULE TYPE: protein SEQUENCE DESCRIPTION: SEQ ID NO: 4:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRIOR APPLICATION DATA:
APPLICATION NUMBER: 09/626,939
FILING DATE: 2000-07-27
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MEDIUM TYPE: Floppy disk
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STREET: 620 Newport Center Drive 16th Floor
                                                               Rosen, Craig A. Roschke, Victor
                        Ruben, Steven
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Conservative
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100.0%; Pred. No. 3.3e-87;
tive 0; Mismatches 0;
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PRIOR FILING DATE: 2000-03-09
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PRIOR APPLICATION NUMBER: US 60/181,258
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                                                                                                                                                                                                                                                                                                                                                                               TITLE OF INVENTION: Human G-protein Chemokine Receptor (CCR5) HDGNR10 FILE REFERENCE: 1488.115PC0D
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TYPE: PRT
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PRIOR FILING DATE: 2000-09-22
NUMBER OF SEQ ID NOS: 58
SOFTWARE: PatentIn version 3.0
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                                                                                                                                                                  TYPE: PRT
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FILING DATE: 2001-02-09
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PRIOR APPLICATION NUMBER: 60/194,361
PRIOR FILING DATE: 2000-04-05
NUMBER OF SEQ ID NOS: 24
SOFTWARE: PATENTIN Ver. 2.1
SEQ ID NO 3
LENGTH: 352
TYPE: PAT
ORGANISM: Homo sapien
CCT-US01-10708-3
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GENERAL INFORMATION:
APPLICANT: Genalssance Pharmaceuticals
APPLICANT: Choi, Julie
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Best Local Similarity
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TITLE OF INVENTION: SULFATED CCR5 PEPTIDES FOR HIV-1 INFECTION
FILE REFERENCE: 2048/61010-A-PCT/JPW/SHS/AX
CURRENT APPLICATION NUMBER: PCT/US01/06699
CURRENT FILING DATE: 2001-02-28
NUMBER OF SEQ ID NOS: 17
                                                                                                                                APPLICANT: Klicm, Stefanie E.
APPLICANT: Koshy, Becna
TITLE OF INVENTION: Haplotypes of the CCR5 Gene
FILE REFERENCE: MMH-0505CT CCR5
CURRENT APPLICATION NUMBER: PCT/US01/10708
CURRENT FILING DATE: 2001-04-04
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US-10-290-058A-6
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US-10-290-628-1
US-10-290-422-67
US-60-452-680-12568
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•	US-09-949-004-443 .	US-60-466-412-7701	US-60-465-241-4290	US-60-455-444-4290	US-60-453-050-7701	US-60-453-135-7701	US-60-452-680-12373	US-10-219-051B-10296	US-10-219-051B-10292	US-10-239-423-63	US-09-893-512A-13	US-09-949-004-244	US-60-466-412-7700	US-60-465-241-4289	US-60-455-444-4289	US-60-453-050-7700	US-60-453-135-7700	US-60-452-680-12372	US-10-239-423-64
	Sequence	Sequence	Sequence	Sequence	Sequence	Sequence	Sequence	Sequence	Sequence	Sequence	Sequence	Sequence	Sequence	Sequence	Sequence	Sequence	Sequence	Sequence	Sequence
	443, App	7701, Ap	4290, Ap	4290, Ap	7701, Ap	7701, Ap	12373, A	10296; A	10292, A	63, Appl	13, Appl	244, App	•	4289, Ap	4289, Ap	7700, Ap	7700, Ap	12372, A	64, Appl

## ALIGNMENTS

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RESULT 1
PCT-US02-29560-259
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; ORGANISM: Homo
PCT-US02-29560-259
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SOFTWARE: FastSEQ for Windows Version 3.0
SEQ ID NO 259
LENGTH: 352
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APPLICANT: Afar, Daniel
                                                                                                                                                                                                                                                      Matches 184;
                                                                                                                                                                                                                                                                                     Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT: EOS Biotechnology, Inc.
TITLE OF INVENTION: Methods of Diagnosis of Cancer, Compositions
TITLE OF INVENTION: Methods of Screening for Modulators of Cance
FILE REFERENCE: 018501-002710PC
CURRENT APPLICATION NUMBER: PCT/US02/29560
CURRENT FILING DATE: 2025-11-01
PRIOR APPLICATION NUMBER: US 60/323,469
PRIOR FILING DATE: 2001-09-17
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181
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Mack, David H.
Wilson, Keith E.
Zlotnik, Albert
                            HFPY 184
                                                                                                                        LKSMTDIYLLNLAISDLFFLLTVPFWAHYAAAQWDFGNTMCQLLTGLYFIGFFSGIFFII
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Gish, Kurt C.
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ilarity 100.0%;
Conservative (
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                                                                                                                                                                                               ; LENGTH: 352
; TYPE: PRT
; ORGANISM: Homo sapiens
PCT-US03-03763-1
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Best Local Similarity
                                                                                                                                                                                                                                                                    SOFTWARE: PatentIn version 3.1 SEQ ID NO 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TITLE OF INVENTION: Sulfated CCR5 Peptides FILE REFERENCE: 61010-AB1-PCT/JPW/JTL CURRENT APPLICATION NUMBER: PCT/JUS02/06345 CURRENT FILING DATE: 2002-02-28
                                                                                                                                   Matches
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SEQ ID NO 1
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                                                                                                                                                                                                                                                                                                                PRIOR APPLICATION NUMBER: US 10/071,866
PRIOR EILING DATE: 2002-02-08
PRIOR APPLICATION NUMBER: US 10/072,301
PRIOR EILING DATE: 2002-02-08
PRIOR APPLICATION NUMBER: US 10/133,978
PRIOR EILING DATE: 2002-04-25
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                                                                                                                                                                                                                                                                                                                                                                                                                        CURRENT APPLICATION NUMBER: PCT/US03/03763
CURRENT FILING DATE: 2003-02-07
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT: Hua, Shaobing APPLICANT: Pauling, Mic APPLICANT: Zhu, Li
                                                                                                                                                                                                                                                                                                     NUMBER OF SEQ ID NOS: 64
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                                                                                                                                                                                                                                                                                                                                                                                                                                                       ITLE OF INVENTION: METHODS FOR GENERATING ANTIBODIES AGAINST MEMBRANE PROTEINS ILE REFERENCE: 25636-728
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ENGTH: 352
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184;
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                                                                                  MDYQVSSPIYDINYYTSEPCQKINVKQIAARLLPPLYSLVFIFGFVGNMLVILILINCKR 60
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Pauling, Michelle H.
                                                                                                                                85.4%; Score 958; DB 1; nilarity 100.0%; Pred. No. 3.2e-88; Conservative 0; Mismatches 0;
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For HIV-1 Infection
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APPLICANT: VENTER, J. Craig et al.
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LENGTH: 352
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Best Local
                                                     NUMBER OF SEQ ID NOS: 6961
SOFTWARE: FASTSEQ for Windows Version 4.0
SEQ ID NO 242
LENGTH: 352
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CURRENT FILING DATE: 2000-01-28
PRIOR APPLICATION NUMBER: 60/231,401
PRIOR FILING DATE: 2000-09-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TITLE OF INVENTION: POLYMORPHISMS IN KNOWN GENES ASSOCIATED TITLE OF INVENTION: WITH INFLAMMATORY AUTOIMMUNE DISEASE, METHODS OF DETECTION TITLE OF INVENTION: AND USES THEREOF
                                                                                                                               APPLICANT: VENTER, J. Craig et al.
APPLICANT: VENTER, J. Craig et al.
TITLE OF INVENTION: POLYMORPHISMS IN HUMAN G-PROTEIN COUPLED TITLE OF INVENTION: RECEPTOR GENES ASSOCIATED WITH DISEASE, TITLE OF INVENTION: AND USES THEREOF FILE REFERENCE: CL000848
CURRENT APPLICATION NUMBER: US/09/949,004
CURRENT FILING DATE: 2002-12-20
PRIOR APPLICATION NUMBER: 60/232,045
PRIOR FILING DATE: 2000-09-13
ORGANISM: Human
-09-949-004-242
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SOFTWARE: FastSEQ for Windows Version 4.0
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APPLICANT: Dragic, Tatjana
APPLICANT: Olson, William C.
TITLE OF INVENTION: SULFATED CCR5 PEPTIDES FO
FILE REPERENCE: 61010-AB-1
CURRENT APPLICATION NUMBER: US/10/086,814
CURRENT FILING DATE: 2002-02-28
NUMBER OF SEQ ID NOS: 38
SOPTMARE: Patentin version 3.1
SEQ ID NO 1
                                                                                                                                              RESULT 7
US-10-245-882-259
; Sequence 259, Application US/10245882
; GENERAL INFORMATION:
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; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-086-814-1
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US-10-086-814-1
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Best Local Similarity
                                                                                 APPLICANT: Afar, Daniel
APPLICANT: Aziz, Natas
APPLICANT: Gish, Kurt
APPLICANT: Hevezi, Pet
                                                                    APPLICANT:
 INT: AZIZ, Natasha
INT: Glsh, Kurt C.
INT: Hevezi, Peter A.
INT: Mack, David H.
INT: Milson, Keith E.
INT: Zlotnik, Albert
INT: Eos Biotechnology, I
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Inc.
Diagnosis
      of Cancer,
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                                                          ; TYPE: PRT
; ORGANISM: human
US-10-323-314-1
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US-10-245-882-259
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PRIOR FILING DATE: 2001-09-17
PRIOR APPLICATION NUMBER: US 60/323,887
PRIOR FILING DATE: 2001-09-20
PRIOR APPLICATION NUMBER: US 60/325,114
PRIOR FILING DATE: 2001-09-25
PRIOR FILING DATE: 2001-10-29
PRIOR FILING DATE: 2001-10-29
PRIOR FILING DATE: 2001-10-29
PRIOR FILING DATE: 2001-11-13
PRIOR APPLICATION NUMBER: US 60/350,666
PRIOR APPLICATION NUMBER: US 60/355,145
PRIOR FILING DATE: 2002-02-08
PRIOR FILING DATE: 2002-02-08
PRIOR FILING DATE: 2002-02-08
PRIOR APPLICATION NUMBER: US 60/369,899
PRIOR APPLICATION NUMBER: US 60/369,899
PRIOR APPLICATION NUMBER: US 60/372,246
PRIOR FILING DATE: 2002-04-12
PRIOR FILING DATE: 2002-04-12
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SOFTWARE: Fast
SEQ ID NO 259
FNGTH: 352
                                                                                                                                                                      Sequence 1, Application US/10323314

GENERAL INFORMATION:

APPLICANT: Dragic, Tatjana
APPLICANT: Olson, William
TITLE OF INVENTION: SULFATED CCR5 PEPTIDES FOR HIV-1 INFECTION
FILE REFERENCE: 2048/61010-1/JPW/MAF/DJK
CURRENT APPLICATION NUMBER: US/10/323,314
CURRENT FILING DATE: 2002-12-19
RUMBER OF SEQ ID NOS: 17
RUMBER OF SEQ ID NOS: 17
                                                                                                             SOFTWARE: PatentIn
SEQ ID NO 1
LENGTH: 352
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  Query Match
Best Local Similarity
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; Pred. No. 3.2e-88;
0; Mismatches 0;
Score 958; DB 6; Pred. No. 3.2e-88
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                Length 352;
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Matches 184;

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US-10-225-567A-352
; Sequence 352, Application US/10225567A
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                                                                                                                                 US-10-290-058A-6
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Best Local S
Matches 184
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     Sequence 6, Application US/10290058A
GENERAL INFORMATION:
APPLICANT: Silos-Santiago, Inmaculada
FITLE OF INVENTION: Methods and Compositions for Treating
FITLE OF INVENTION: UTClogical Disorders Using 313, 333,
FILE REFERENCE: MPIO1-289PIRM
CURRENT FILING DATE: 2002-11-07
PRIOR APPLICATION NUMBER: US/10/290,058A
CURRENT FILING DATE: 2001-11-07
PRIOR APPLICATION NUMBER: 60/344,552
PRIOR FILING DATE: 2001-11-07/
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SEQ ID NO 352
LENGTH: 352
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APPLICANT: ROUSH, Christine L.
TITLE OF INVENTION: ANTIGENIC PEPTIDES AND ANTIBODIES FOR G PROTEIN-COUPLED RECEPTORS
FILE REFERENCE: 1920-4-4
CURRENT EPILICATION NUMBER: US/10/225,567A
CURRENT EPILING DATE: 2001-12-19
PRIOR APPLICATION NUMBER: 60/257,144
PRIOR FILING DATE: 2000-12-19
NUMBER OF SEQ ID NOS: 2292
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Similarity 100.0%; Pred. No. 3.2e-88;
84; Conservative 0; Mismatches 0;
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SEQ ID NOS:
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; TYPE: PRT
; ORGANISM: Homo Sapien
US-10-290-058A-6
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CURRENT FILING DATE: 2003-02-07
PRIOR APPLICATION NUMBER: US 10/071,866
PRIOR FILING DATE: 2002-02-08
PRIOR FILING DATE: 2002-02-08
PRIOR FILING DATE: 2002-02-08
PRIOR APPLICATION NUMBER: US 10/133,978
PRIOR APPLICATION NUMBER: US 10/133,978
PRIOR FILING DATE: 2002-04-25
NUMBER OF SEQ ID NOS: 64
SOFTWARE: Patentin version 3.1
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US-10-360-828-1
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LENGTH: 352
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Matches 18
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GENERAL INFORMATION:
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Best Local
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Best Local Similarity
                                                                                                                                                                                                                                                                                                   SEQ ID NO 1
LENGTH: 352
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TITLE OF INVENTION: HUMAN MONOCLONAL ANTIBODIES
FILE REFERENCE: 25636-727
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT: Hua, Shaobing APPLICANT: Pauling, Mic
                                                                                                                                                                                                                                                                                         TYPE: PRT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           121 LLTIDRYLAVVHAVFALKARTVTFGVVTSVITWVVAVFASLPGIIFTRSQKEGLHYTCSS 180
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                                                                                                                 Similarity
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                                      Adan
                                                                                LLTIDRYLAVVHAVFALKARTVTFGVVTSVITWVVAVFASLPGIIFTRSQKEGLHYTCSS 180
                     HFPY 184
                                                                   LLTIDRYLAVVHAVFALKARTVTFGVVTSVITWVVAVFASLPGIIFTRSQKEGLHYTCSS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Pauling, Michelle H.
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; Pred. No. 3.2e-88;
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Pred. No. 3.2e-88
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                                                                                                                            ; TYPE: PRT
; ORGANISM: Homo sapiens
US-60-452-680-12568
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US-60-452-680-12568
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Best Local Similarity 100.
184; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 12568, Appl GENERAL INFORMATION:
                                            Matches
                                                           Query Match
Bost Local Similarity
                                                                                                                                                                                                       APPLICANT: CARGILL, Michele
APPLICANT: GRUPE, Andrew
TITLE OF INVENTION: GENETIC POLYMORPHISMS ASSOCIATED WITH
TITLE OF INVENTION: ALZHEIMER'S DISEASE, METHODS OF DETECTION AND USES THEREOF
FILE REFERENCE: CL001450
CURRENT APPLICATION NUMBER: US/60/452,680
CURRENT FILING DATE: 2003-03-07
NUMBER OF SEQ ID NOS: 116213
SOFTWARE: FASISEQ for Windows Version 4.0
SEQ ID NO 12568
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT: FORSSMANN, Wolf-Georg; FORSSMANN, Ulf; ADERMANN, Knut; APPLICANT: HEITLAND, Aleksandra; SPODSBERG, Nikolaj TITLE OF INVENTION: Diagnostic Agent and Medicament for Examining the TITLE OF INVENTION: Coll Surface Proteome of Tumor and Inflammation Cells TITLE OF INVENTION: for Treating Tumor Diseases and Inflammatory Diseases, TITLE OF INVENTION: preferably with the Aid of Specific Chemokine
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TITLE OF INVENTION: Pref
TITLE OF INVENTION: Rece
FILE REFERENCE: 022217us
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ORGANISM: Artificial Sequence
FEATURE:
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OTHER INFORMATION: Amino Acid Sequence for the Generation of Antibodies
                                                                                                                                                                                          ENGTH: 352
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                                            184;
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MDYQVSSPIYDINYYTSEPCQKINVKQIAARLLPPLYSLVFIFGFVGNMLVILILINCKR 60
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                                            Conscruative
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100.0%; Pred. No. 3.2e-88;
O. Mismatches 0;
                                     85.4%; Score 958; DB 7; I
100.0%; Prcd. No. 3.2e-88;
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; SEQ ID NO 7850
; LENGTH: 352
; TYPE: PRT
; ORGANISM: Homo sapiens
US-60-453-135-7850
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US-60-453-050-7850
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Matches
                                                               SOFTWARE: FastSEQ for Windows Version 4.0 SEQ ID NO 7850 LENGTH: 352
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APPLICANT: LUKE, May
AP
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TITLE OF INVENTION: MYCCARDIAL INFARCTION, METHODS C
                                                                                                                                                                                                    CURRENT APPLICATION NUMBER: US/60/453,050 CURRENT FILING DATE: 2003-03-10
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CURRENT FILING DATE: 2003-03-10
NUMBER OF SEQ ID NOS: 82762
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                                                                                                                                                                          NUMBER OF SEQ ID NOS: 82762
ORGANISM:
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Search Job tim	Дb	Qy	рb	Qy	ф	Qy	Db	Qy	Best 1	Ouerv Match	US-60-4
Search completed: June 3, 2003, 15:33:14 Job time: 47.7778 secs	181 HFPY 184	181 HFPY 184	121 LLTIDRYLAVVHAVFALKARTVTFGVVTSVITWVVAVFASLPGIIFTRSQKEGLHYTCSS 180	121 LLTIDRYLAVVHAVFALKARTVTEGVVTSVITWVVAVFASLPGIIFTRSQKEGLHYTCSS 1.80	61 LKSMTDIYLLNLAISDLEFLLTVPFWAHYAAAQWDFGNTMCQLLTGLYFIGEFSGIFFII 120	61 LKSMTDIYLLNLAISDLFFLLTVPFWAHYAAAQWDFGNTMCQLLTGLYFIGFFESGIFFII 120	1 MDYQVSSPIYDINYYTSEPCQKINVKQIAARLLPPLYSLVFIFGFVGNWLVILILINCKK 60	1 MDYQVSSPIYDINYYTSEPCQKINYKQIAARLLPPLYSLYEIFGFYGNMLYILILINCKR 60	Similarity 100.0%; 4; Conservative (		US-60-453-050-7850